

=> FIL HCAPLUS

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|     |        |     |              |        |        |                        |
|-----|--------|-----|--------------|--------|--------|------------------------|
| L36 | 197    | SEA | FILE=HCAPLUS | ABB=ON | PLU=ON | TAMPONADE              |
| L37 | 128496 | SEA | FILE=HCAPLUS | ABB=ON | PLU=ON | OPHTHALMI? OR EYE      |
| L38 | 72     | SEA | FILE=HCAPLUS | ABB=ON | PLU=ON | L36 AND L37            |
| L39 | 55042  | SEA | FILE=HCAPLUS | ABB=ON | PLU=ON | SURGERY/CV OR ?SURGER? |
| L40 | 37     | SEA | FILE=HCAPLUS | ABB=ON | PLU=ON | L38 AND L39            |

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=> D IBIB ABS L40 1-37

L40 ANSWER 1 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:602743 HCAPLUS

TITLE: The combined use of perfluorohexyloctane (F6H8) and silicone oil as an intraocular tamponade in the treatment of severe retinal detachment

AUTHOR(S): Rizzo, Stanislao; Genovesi-Ebert, Federica; Belting, Claudia

CORPORATE SOURCE: Eye Surgery Clinic, Santa Chiara Hospital, Pisa, 56100, Italy

SOURCE: Graefe's Archive for Clinical and Experimental Ophthalmology (2006), 244(6), 709-716  
CODEN: GACODL; ISSN: 0721-832X

PUBLISHER: Springer GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: The purpose of this study was to investigate the combined use of perfluorohexyloctane (F6H8) and 1,000-centistoke silicone oil as a long-term intraocular tamponade in the treatment of complicated retinal detachment. Methods: Sixty consecutive eyes affected by

complicated retinal detachment with (1) retinal breaks of the lower two quadrants and severe proliferative vitreoretinopathy, (2) inferior giant retinal tear, (3) penetrating trauma or (4) choroidal detachment underwent pars plana vitrectomy using a combined internal tamponade of F6H8 and silicone oil. The double filling (DF) was removed after 40-50 days. The anatomical outcome and the complications due to the DF are reported. Results: Retinal reattachment was achieved in all but one patient. Thirty-eight (63%) eyes needed further surgery with silicone oil tamponade. Silicone oil was successfully removed in 22 eyes. Sixteen (27%) eyes had retained silicone oil at the last follow-up examination. One eye showed persistent retinal detachment despite further surgery. Main complications of the DF were recurrent retinal detachment of the upper retina in six (10%) eyes and membrane formation in 25 (42%) eyes. Conclusions: A combined internal tamponade of F6H8 and silicone oil may be a useful tool in the treatment of complicated retinal detachment involving the lower quadrants of the retina.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:253105 HCAPLUS

DOCUMENT NUMBER: 144:357564

TITLE: An experimental study on tolerance of perfluorohexyloctane as long-term vitreous replacement

AUTHOR(S): Yuan, Li; Li, Xiaoxin

CORPORATE SOURCE: People's Hospital, Peking University, Beijing, 100044, Peop. Rep. China

SOURCE: Yanke Yanjiu (2005), 23(3), 258-261

CODEN: YAYAFH; ISSN: 1003-0808

PUBLISHER: Henansheng Yanke Yanjiuso

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB To investigate the tolerance of ocular tissue to perfluorohexyloctane (F6H8), a extended-term vitreous replacement, F6H8, silicone oil and 12% perfluoropropane (C3F8) were injected into vitreous cavity of the left eyes in New Zealand rabbits following the pars plana vitrectomy or vitrectomy combined with lensectomy. The eyes were observed clin. and enucleated by the examination of light microscope and transmission electron microscope on the 4th, 8th and 12th weeks after surgery resp. The aphakic eyes of three exptl. groups showed corneal edema and vascularization. Formation of posterior corneal membrane and closure of anterior chamber angle could be seen in the aphakic eyes in silicone oil and F6H8 injection groups. Posterior subcapsular lens opacity was observed in silicone oil-tamponade group and flake-like white ppts. in the anterior vitreous cavity were seen in F6H8 injection group. The mitochondria in the photoreceptor inner segment was swollen after 4 wk in F6H8 injection group, and the similar changes were in the superior retina after 12 wk in silicone oil-tamponade group and 4 wk in 12% C3F8-tamponade group under the transmission electron microscope. "Moth-eaten" phenomenon was also seen in a few photoreceptor outer segments 8 and 12 wk after injection of F6H8. F6H8 has well tolerance in crystalline lens and retinas of rabbit, but can result in severe damage of cornea and anterior chamber angle when it enters into the anterior chamber.

L40 ANSWER 3 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1347051 HCAPLUS

DOCUMENT NUMBER: 144:460750

TITLE: A pilot study on the use of silicone oil-RMN3 as

AUTHOR(S): heavier-than-water endotamponade agent  
Rizzo, Stanislao; Genovesi-Ebert, Federica; Belting,  
Claudia; Vento, Andrea; Cresti, Federica  
CORPORATE SOURCE: Eye Surgery Clinic, Santa Chiara Hospital, Pisa,  
56100, Italy  
SOURCE: Graefe's Archive for Clinical and Experimental  
Ophthalmology (2005), 243(11), 1153-1157  
CODEN: GACODL; ISSN: 0721-832X  
PUBLISHER: Springer GmbH  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Aims: This work was conducted to report an interventional non-comparative pilot study using Oxane HD, a mixture of ultra-purified silicone oil and RMN3, a partially fluorinated olefin, as heavier-than-water internal tamponade. Methods: Twenty-eight consecutive patients were recruited for this study. Indications included recurrent retinal detachment (RD) with proliferative vitreoretinopathy (PVR) (stage  $\geq C2$ ) arising from inferior or posterior tears, recurrences after vitreoretinal surgery, penetrating trauma and combined rhegmatogenous and choroidal detachment. The patients underwent a pars plana vitrectomy, membrane peeling, and Oxane HD was used as long-term internal tamponade. Results: Oxane was removed after 88 days (range 45-96 days) and exchanged with BSS in five eyes, long-acting gas in 14 eyes and with silicone oil in nine eyes. Retinal reattachment was achieved in 15 eyes. The overall anatomical success rate obtained using Oxane HD was 53.5%. In 15 patients with previous marked scleral buckling, the success rate was 26%; in nine patients recurrent RD occurred in the inferior sector, in five patients new tears were detected in the lower sectors; membrane formation was observed in 15 eyes. In 13 patients without marked scleral indent, the success rate was 84.6%. There was no evidence of dispersion and excessive inflammation. Conclusion: Oxane HD may be a useful tool in complicated RD with large inferior breaks, inferior PVR or combined rhegmatogenous, and choroidal detachment without marked scleral buckling, which put the eye profile out of shape, led to a higher failure rate and reduced the tamponading effectiveness of Oxane HD.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 4 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1314246 HCAPLUS  
DOCUMENT NUMBER: 144:57637  
TITLE: Partially-fluorinated ethers, compositions and uses thereof, for long-term tamponade in the eye  
INVENTOR(S): Simpson, Roderic Nigel Fraser; Chang, Stanley; Sparrow, Janet R.  
PATENT ASSIGNEE(S): The Trustees of Columbia University In the City Of new York, USA  
SOURCE: PCT Int. Appl., 26 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 2005117850  | A1   | 20051215 | WO 2005-US18921 | 20050527 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, |      |          |                 |          |

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,  
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA,  
 NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,  
 SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
 ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-576218P P 20040601

AB The present invention provides a single high-purity liquid comprising a partially fluorinated ether liquid for use as a long-term tamponade agent. Compns. are directed to liquid tamponade agents consisting essentially of DEPE, or to agents comprising a soluble mixture of a partially fluorinated ether and either a silicone liquid (or oil) or a perfluorocarbon liquid (or any other liquid) or oil that is clear, colorless, inert and has a low sp. gr. Partially fluorinated ethers that have a sp. gr. between 1.1 and 1.5 are well suited to rectify the deficiencies of silicone and perfluorocarbon liqs. when they are used as tamponade agents. The soluble mixts. of the invention can be designed to have a sp. gr. so that they do not have buoyancy problems (d. greater than water), yet having a sp. gr. that is not so high as to damage the posterior retina from mech. forces (sp. gr. less than 1.6). The mixts. can also be designed to have a sp. gr. such that the mixture can act as a tamponade on both the superior and inferior retina simultaneously. The present invention provides such soluble mixts. and also partially fluorinated ether liqs. alone, for the use and for the method of postoperative tamponade. Thus, partially fluorinated ether liqs., and mixts. thereof, can be left in the eye postoperatively due to their long-term compatibility with the eye, thereby improving the success of retinal reattachment and healing procedures.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 5 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1221731 HCAPLUS

DOCUMENT NUMBER: 144:122016

TITLE: Triamcinolone-assisted pars plana vitrectomy for retinal disease

AUTHOR(S): Zheng, Yuping; Sun, Naixue; Xiong, Quanchen; Wang, Xiaohua; Quan, Yanlong

CORPORATE SOURCE: Department of Ophthalmology, Second Hospital of Medical College of Xian Jiaotong University, 36 Xiwu Road Xian, 710004, Peop. Rep. China

SOURCE: Eye Science (2005), 21(3), 142-146  
 CODEN: YAXUE3; ISSN: 1000-4432

PUBLISHER: Zhongshan Ophthalmic Center

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Purpose: To determine whether triamcinolone acetate(TA) staining facilitates posterior hyaloid removal in patients undergoing pars plana vitrectomy (PPV) for retinal disease. Methods: A triamcinolone acetate(TA)-assisted vitrectomy was performed on patients with the following disease; proliferative diabetic retinopathy (5 eyes), central retinal vein occlusion (5 eyes), macular hole (3 eyes), and epiretinal membrane(2 eyes). Eyes without apparent preoperative posterior vitreous detachment were enrolled in this study. After a core PPV, TA aqueous suspension (40 mg/mL) was injected into the mid



vitreous cavity to visualize the posterior hyaloid, thus allowing a complete posterior hyaloid separation and removal. The visual acuity, intraocular pressure(IOP), tamponade, corneal pathol., after-cataract, vitreous hemorrhage, and necessity for reoperation were thereafter examined for at least 3 mo after surgery. Results: In all patients, the vitreous body was clearly seen by means of triamcinolone during surgery, and complete removal of posterior hyaloid was facilitated and confirmed. Retina was attached in 14 of 15 eyes, and vision acuity was improved in 9 of 15 eyes. Two eyes showed transient postoperative IOP elevation, 2 eyes had after cataract formation and 1 eye had cataract progression. Vitreous hemorrhage occurred in 1 eye. No eye had corneal pathol. Conclusion: Triamcinolone improved the visibility of the hyaloid and the safety of surgical procedures during PPV. No obvious adverse effect due to toxicity of TA accrued in TA-assisted PPV.

L40 ANSWER 6 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1011776 HCAPLUS

DOCUMENT NUMBER: 144:184552

TITLE: Histopathology and Ultrastructure of Rabbit Retina After Intravitreal Injection of Perfluorohexyloctane (F6H8)

AUTHOR(S): Martinez-Reina, M.; Ruiz-Moreno, Jose M.; Montero, Javier A.; Rueda, Joaquin

CORPORATE SOURCE: Department of Ophthalmology, Miguel Hernandez University School of Medicine, Alicante, Spain

SOURCE: Current Eye Research (2005), 30(9), 773-779

CODEN: CEYRDM; ISSN: 0271-3683

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Purpose: To describe changes in rabbit retina after intravitreal injection of perfluorohexyloctane (F6H8). Methods: Intravitreal injections of C3F8 were performed in the right eye of 48 male New Zealand albino rabbits. All 48 eyes were injected with C3F8. The animals were divided in three groups of 18 each. 18 eyes (6 in each group) were used as controls and 30 (10 in each group) were further injected with F6H8. Animals were sacrificed at days 15, 30, and 60 and the eyes processed for light and electron microscopy and immunohistochem. Results: Vitreous tracts were observed behind the lens in all groups. Epiretinal and retrolental membranes developed in most of the treated eyes. Light microscopy showed retinal vacuolization in all eyes. No significant ultrastructural changes appeared in any of them. Macrophages were observed in the inner limiting membrane. Conclusions: Ultrastructural findings can be considered signs of good tolerance to F6H8, though the appearance of epiretinal membranes associated with the presence of macrophagic response suggests we should refrain from using F6H8 until results from clin. trials are available.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 7 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:500701 HCAPLUS

DOCUMENT NUMBER: 143:319036

TITLE: Long-Term Vitreous Replacement with Perfluorohexyloctane and Silicone Oil: Preliminary Reports of a Multicentric Study

AUTHOR(S): Rizzo, Stanislao; Genovesi-Ebert, Federica; Belting, Claudia; Foltran, Flavio; Gandolfo, Enrico; Lesnoni,

Guido; Dell'Omo, Ermanno; Zenoni, Stefano; Azzolini, Marco; De Molfetta, Vito  
 CORPORATE SOURCE: Ospedale Santa Chiara, Pisa, IT-55100, Italy  
 SOURCE: Ophthalmologica (2005), 219(3), 147-153  
 CODEN: OPHTAD; ISSN: 0030-3755  
 PUBLISHER: S. Karger AG  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Aim: To report on the use of a combined intra-ocular tamponade with silicone oil and perfluorohexyloctane (F6H8) in the treatment of complex retinal detachment. Design: A prospective consecutive interventional case series from seven study centers. Participants: 69 patients presenting a retinal detachment with proliferative vitreoretinopathy (PVR) and retinal breaks of the inferior two quadrants of the fundus. Method: Patients were divided into two groups: (1) 28 eyes which had not been operated on before; (2) 41 eyes affected by recurrent retinal detachment that had had unsuccessful previous surgery with silicone oil or gas tamponade. A pars plana vitrectomy, membrane peeling and - when necessary - a retinotomy were performed; the vitreous cavity was filled with two thirds of F6H8 and one third of silicone oil 1,000 mPas (double filling, DF). The endotamponade was removed after 30-45 days (median 38) and replaced by balanced salt solution or silicone oil according to the condition of the retina. Results: Retinal reattachment was achieved in 52 out of 69 cases (75%) 6 mo after removal of the DF without any endotamponade. Conclusion: The DF with F6H8 and silicone oil allows a good endotamponading to the inferior retina and the posterior pole. The DF appeared to be well tolerated. Further studies are necessary to evaluate whether a DF is advantageous in respect to silicone oil filling alone in case of retinal breaks and PVR of the inferior retina.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 8 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:498334 HCAPLUS  
 DOCUMENT NUMBER: 143:48174  
 TITLE: Surgical method for forming primary movable supporting stump and applying photodynamic therapy after, eye enucleation on account of tumor  
 INVENTOR(S): Tereshchenko, A. V.; Belyi, Yu. A.; Kaplan, M. A.; Gushchina, M. B.  
 PATENT ASSIGNEE(S): Gosudarstvennoe Uchrezhdenie Mezhotraslevoi Nauchno-Tekhnicheskii Kompleks "Mikrokhirurgiya Glaza" im. Akademika S. N. Fedorova, Russia  
 SOURCE: Russ., No pp. given  
 CODEN: RUXXE7  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| RU 2253425             | C1   | 20050610 | RU 2004-103788  | 20040210 |
| PRIORITY APPLN. INFO.: |      |          | RU 2004-103788  | 20040210 |

AB The method involves introducing 0.1-2% aqueous solution of photosensibilizer agent of chlorine series. After accomplishing enucleation, scanning laser radiation of muscle funnel cavity is carried out. Muscle funnel cavity tamponade is done with two implant components. The implant is manufactured from carbon felt impregnated with photosensibilizing gel based on

hyaluronic acid viscoelastic. The gel has 0.1-1 % by mass of photosensitizer of chlorine series. The first implant component is placed at the beginning. Scanning laser radiation of muscle funnel cavity with the first implant component being arranged therein, is carried out during 2-4 min after 15-30 min long exposure away from light action. The second implant component is placed. Scanning laser radiation of muscle funnel cavity after 15-30 min long exposure away from light action is carried out in the same mode. Muscles are sutured. Soft tissues are sutured layer-by-layer. The postoperative space is drained. Sutures are placed on conjunctiva. Eye prosthesis is set and eyelids are sutured to each other. Photosensibilizer agent of chlorine series is repeatedly introduced into cubital vein of one of the arms. 5-15 min later, i.v. laser radiation treatment of blood is carried out via laser light guide introduced into cubital vein of one of the other arm, during 10-45 min with total power of 20-50 mW.

L40 ANSWER 9 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:498333 HCAPLUS

DOCUMENT NUMBER: 143:22282

TITLE: Surgical method for forming primary movable supporting stump and applying photodynamic therapy after eye enucleation in cancer patients

INVENTOR(S): Tereshchenko, A. V.; Belyi, Yu. A.; Kaplan, M. A.; Gushchina, M. B.

PATENT ASSIGNEE(S): Gosudarstvennoe Uchrezhdenie Mezhotraslevoi Nauchno-Tekhnicheskii Kompleks "Mikrokhirurgiya Glaza" im. Akademika S. N. Fedorova, Russia

SOURCE: Russ., No pp. given  
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| RU 2253424             | C1   | 20050610 | RU 2004-103787  | 20040210 |
| PRIORITY APPLN. INFO.: |      |          | RU 2004-103787  | 20040210 |

AB The method involves introducing 0.1-1% aqueous solution of photosensitizers of porphyrin or hematoporphyrin series belonging to Photohem or Photophryne group at a dose of 2.5-5.0 mg/kg. After accomplishing enucleation, scanning laser radiation of muscle funnel cavity is carried out. Muscle funnel cavity tamponade is done with two implant components. The implant is manufactured from carbon felt impregnated with photosensitizing gel based on hyaluronic acid viscoelastic from chealon, viscoat or hyatulon group. The gel has 0.1-1 % by mass of photosensibilizer of porphyrin or hematoporphyrin series belonging to Photohem or Photophryne group. The first implant component is placed at the beginning. Scanning laser radiation of muscle funnel cavity with the first implant component being arranged in it, is carried out during 2-4 min after 15-30 min long exposure away from light action. The second implant component is placed. Scanning laser radiation of muscle funnel cavity after 15-30 min long exposure away from light action is carried out in the same mode. Direct muscles are sutured. Soft tissues are sutured layer-by-layer. The postoperative space is drained. Laser light guide is introduced into cubital vein immediately after enucleation. I.v. laser radiation treatment of blood is carried out during 10-45 min with total power of 20-50 mW.

L40 ANSWER 10 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:498332 HCAPLUS  
 DOCUMENT NUMBER: 143:3380  
 TITLE: Surgical photodynamic method for treating  
 endophthalmitis  
 INVENTOR(S): Belyi, Yu. A.; Tereshchenko, A. V.; Kaplan, M. A.;  
 Volodin, P. L.; Plakhotnii, M. L.; Yudina, N. N.  
 PATENT ASSIGNEE(S): Gosudarstvennoe Uchrezhdenie Mezhotraslevoi  
 Nauchno-Tekhnicheskii Kompleks "Mikrokhirurgiya Glaza"  
 im. Akademika S. N. Fedorova, Russia  
 SOURCE: Russ., No pp. given  
 CODEN: RUXXE7  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| RU 2253419 | C1   | 20050610 | RU 2003-133278  | 20031118 |

PRIORITY APPLN. INFO.: RU 2003-133278 20031118

AB The method involves taking fibrinous exudates from the anterior chamber, pupil area, iris and from vitreous body cavity to carry out bacteriol. anal. Closed subtotal vitrectomy is carried out with maximum exudates and inflammatory membranes being removed from the vitreous cavity. A photosensibilizer agent is introduced into the vitreous cavity and hold without being exposed to light action during 10-15 min. Photodynamic therapy with endolaser radiation treating the vitreous cavity is applied by applying intravitreal light guide with wavelength of 661-666 nm. The vitreous cavity tamponade with silicon oil is carried out and antibacterial prepns. are introduced. The photosensibilizer agent is introduced into the anterior chamber and the anterior chamber is irradiated with coaxial halogen lamp light via corneal paracentesis with red light filter being used.

L40 ANSWER 11 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:498331 HCAPLUS  
 DOCUMENT NUMBER: 143:3379  
 TITLE: Surgical method for applying photodynamic treatment to  
 subretinal neovascular membranes  
 INVENTOR(S): Belyi, Yu. A.; Tereshchenko, A. V.; Kaplan, M. A.;  
 Volodin, P. L.  
 PATENT ASSIGNEE(S): Gosudarstvennoe Uchrezhdenie Mezhotraslevoi  
 Nauchno-Tekhnicheskii Kompleks "Mikrokhirurgiya Glaza"  
 im. Akademika S. N. Fedorova, Russia  
 SOURCE: Russ., No pp. given  
 CODEN: RUXXE7  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| RU 2253418 | C1   | 20050610 | RU 2003-133277  | 20031118 |

PRIORITY APPLN. INFO.: RU 2003-133277 20031118

AB Method involves applying vitrectomy, retinotomy and mech. removal of subretinal neovascular membranes from under the retina. 0.1-2% photosensibilizer agent solution of chlorine row selected from a group containing photolon, radachlorine, or photoditazine at a dose of 0.8-1.1 mg/kg is

i.v. introduced. Visual control of subretinal neovascular membrane cells fluorescence is carried out with photodynamic fluorescent diagnosis method being applied. Trans-scleral laser radiation with wavelength of 661-666 nm during 40-140 s with radiation dose being equal to 30-130 J/cm<sup>2</sup>. Irradiation is carried out via laser light guide having lens mounted in advance in tunnel formed in inferoexterior or superoexterior quadrant at the subretinal neovascular membrane localization place. The light guide is removed after having finished photodynamic therapy course. Surgical removal of the subretinal neovascular membrane is carried out in 2-3 wk concurrently with subretinal edema and hemorrhages resorption taking place with following perfluororg. compound tamponade that is substituted with silicon oil in course of operation. The surgery is finished with sutures placed over sclerectomy and conjunctiva areas.

L40 ANSWER 12 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:433477 HCAPLUS

DOCUMENT NUMBER: 143:165911

TITLE: Pharmacokinetics of intravitreal 5-fluorouracil prodrugs in silicone oil: experimental studies in pigs  
AUTHOR(S): Laugesen, Caroline Schmidt; Steffansen, Bente; Scherfig, Erik; la Cour, Morten

CORPORATE SOURCE: Eye Department, Rigshospitalet, National University Hospital, Copenhagen, Den.

SOURCE: Acta Ophthalmologica Scandinavica (2005), 83(2), 184-190

CODEN: AOSCFV; ISSN: 1395-3907

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Purpose: To examine the in vivo pharmacokinetics of intravitreal 5-Fluorouracil (5-FU) following tamponade with 5-FU prodrug silicone oil formulations. Method: Two different alkoxycarbonyl 5-FU prodrugs denoted C12 and C18 were synthesized and formulated as silicone oil suspensions. A total of 26 pigs underwent conventional three-port lens-sparing pars plana vitrectomy. Approx. 1.6 mL of the prodrug-silicone oil formulation was placed in the vitreous cavity. Operated eyes were enucleated between 20 min and 168 h postoperatively, and analyzed for their content of free 5-FU by high performance liquid chromatog. Results: With the C12 prodrug silicone oil formulation, the concentration of free 5-FU in the vitreous water phase 1 h after surgery was  $3.30 \pm 1.62 \mu\text{g/mL}$ . After 4 h this concentration had declined to  $1 \mu\text{g/mL}$ . With the C18 prodrug, the concentration of free vitreal 5-FU never reached  $1 \mu\text{g/mL}$  during the 7 days these expts. lasted. A math. model is presented that can explain the measured data if the clearance of 5-FU from the vitreous water phase follows first order kinetics with a half-life of 20 min. Conclusion: These expts., and the model anal., suggest that the elimination half-life of 5-FU in the vitreous cavity of a vitrectomized, silicone oil-filled eye is very fast. The model anal. indicates that an alkoxycarbonyl 5-FU prodrug with a specific release rate constant of  $10.7 \mu\text{g}/(\sqrt{\text{hcm}^2})$  can maintain an intravitreal 5-FU concentration above  $1 \mu\text{g/mL}$  for 5 days in the porcine eye.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 13 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:949259 HCAPLUS

DOCUMENT NUMBER: 141:415846

TITLE: Evaluation of tamponade material in

AUTHOR(S): Tsukahara, Itsuro; Sato, Yukihiro; Takeuchi, Shinobu  
 CORPORATE SOURCE: Dep. Ophthalmol., Toho Univ. Sakura Hosp., Sakura,  
 285-8741, Japan  
 SOURCE: Atarashii Ganka (2004), 21(10), 1401-1404  
 CODEN: ATGAEX; ISSN: 0910-1810  
 PUBLISHER: Medikaru Aoi Shuppan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese

AB Several reports have focused on the efficacy of vitrectomy for  
 rhegmatogenous retinal detachment (RRD). Vitrectomy indications for RRD  
 have recently been expanded. However, in vitreous surgery for  
 RRD, gas tamponade is necessary postoperatively. Long-acting  
 gas has been used as the tamponade material. If air could be  
 used as the tamponade material, early recovery to a normal  
 social life might be possible. We compared a consecutive series of  
 patients undergoing primary vitrectomy for RRD, 18 in whom air was used as  
 the tamponade material and 17 in whom sulfur hexafluoride (SF6)  
 gas was used. All were treated by the same surgeon. Initial retinal  
 reattachment was obtained in 17 of the 18 eyes (94.9%) in the  
 air tamponade group, and 15 of the 17 eyes (88.2%) in  
 the SF6 gas tamponade group. There was no significant  
 difference in retinal reattachment rate between the groups ( $p = 0.6$ ). Nor  
 was there any significant difference in reattachment rate between the  
 groups in terms of nos. and location of retinal breaks, with/without  
 scleral buckling. All 15 eyes with retinal breaks in superior  
 quadrants, including multiple tears, were successfully treated using air  
 in one operative procedure. We conclude that retinal detachments due to  
 superior tears can be treated using air tamponade.

L40 ANSWER 14 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:687414 HCAPLUS  
 DOCUMENT NUMBER: 142:85584  
 TITLE: Strategies to influence PVR development  
 AUTHOR(S): Kirchhof, Bernd  
 CORPORATE SOURCE: Department of Vitreo-retinal Surgery, Centre of  
 Ophthalmology, University of Cologne, Cologne, 50931,  
 Germany  
 SOURCE: Graefe's Archive for Clinical and Experimental  
 Ophthalmology (2004), 242(8), 699-703  
 CODEN: GACODL; ISSN: 0721-832X  
 PUBLISHER: Springer GmbH  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English

AB A review. Proliferative vitreo-retinopathy (PVR) is a complication of  
 rhegmatogenous retinal detachment or severe ocular trauma (intraocular  
 foreign body, penetration, perforation, contusion, rupture). The risk of  
 PVR varies from 10 to 40% depending on the original disease. Strategies  
 to influence the risk of PVR include surgical techniques, pharmacol.  
 adjuncts, and preventive measurements. Surgical influences on the risk of  
 PVR comprise: surgical skills (buckling, atraumatic procedure), primary  
 vitrectomy, early vitrectomy, retinectomy, choice of vitreous  
 tamponade agent. The influence of most such parameters is not  
 confirmed by prospective randomized studies. Pharmaceutical adjuncts  
 include daunomycin, 5-fluoruracil plus heparin and others. The influence  
 of most such parameters has been studied by prospective randomized  
 studies. The effect is statistically significant, its clin. relevance is  
 subject of current discussion. Prevention of PVR, via prevention of  
 injury, was successful in the past as shown by the reduction of wind screen  
 injuries after the seatbelt legislation was installed, and reduction of work

related injuries from protective eyewear. As for the treatment of existent PVR despite some progress in the past, there should be better ways of treatment ahead of us.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 15 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:921623 HCAPLUS

DOCUMENT NUMBER: 140:47220

TITLE: The influence of silicone oil intraocular tamponade to the residual anterior lens capsule after removing the lenticular cortex

AUTHOR(S): Miyamoto, Takeshi

CORPORATE SOURCE: Dep. Ophthalmol., Wakayama Med. Univ., Japan

SOURCE: Wakayama Igaku (2003), 54(3), 154-163

CODEN: WKMIAO; ISSN: 0043-0013

PUBLISHER: Wakayama Igakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Complete removal of vitreous base is one of the important steps during vitrectomy for the treatment of proliferative vitreoretinopathy or diabetic retinopathy. Excision of crystalline lens may be useful to facilitate the complete removal of vitreous humor. Vitreous cavity may be tamponaded with gas or silicone oil at the end of surgery. We therefore in the present study examined the histol. of residual anterior capsule following lensectomy and vitrectomy with or without silicone oil tamponade in human (n = 2) and rabbit specimens (n = 40) by using light and electron microscopy. And we also examined the effects of topical exposure of mitomycin C (MMC) to the posterior surface of anterior capsule during surgery. In human specimens, the presence of many vacuoles amide matrix accumulation on the posterior capsular surface, suggesting the deposition of emulsified silicone oil droplets, were observed. In rabbit eyes, during healing intervals in eyes with or without silicone oil tamponade, regenerated lens structure of Soemmerring's ring or fibrous tissue was formed in peripheral or central area of the residual capsule, resp. Ultrastructural observation revealed the presence of many vacuoles amide matrix accumulation on the posterior capsular surface, suggesting the deposition of emulsified silicone oil droplets. These results did not contradict the result by the experiment on the human specimens. MMC topical exposure to the posterior surface of anterior capsule during surgery statistically reduced both the anterior lens capsule opacification and the formation of Soemmerring's ring.

L40 ANSWER 16 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:950354 HCAPLUS

DOCUMENT NUMBER: 139:301946

TITLE: Evidence of toxic side effects of perfluorohexyloctane after vitreoretinal surgery as well as in previously established in vitro models with ocular cell types

AUTHOR(S): Mertens, Sylvia; Bednarz, Juergen; Engelmann, Katrin

CORPORATE SOURCE: Klinik und Poliklinik fuer Augenheilkunde, Universitätsklinikum Hamburg-Eppendorf, Hamburg, 20246, Germany

SOURCE: Graefe's Archive for Clinical and Experimental Ophthalmology (2002), 240(12), 989-995

CODEN: GACODL; ISSN: 0721-832X

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cases of ocular irritation have been observed after early clin. trials using perfluorohexyloctane (F6H8) as endotamponade. In our clinic two of three eyes developed severe inflammatory-like reactions after intermediate-term tamponade. These cases will be depicted, serving as background for the exptl. study. To elucidate possible toxic effects of F6H8 on different ocular cell types and corneal tissue we applied our previously established in vitro models to investigate effects of F6H8 on cultured ocular cells in comparison with perfluorodecaline. Vitality and proliferation of cultured human corneal endothelial cells (HCEC) and human retinal pigment epithelial cells (RPE) were measured after incubation with F6H8 or perfluorodecaline for up to 5 days. Vitality was evaluated using the Live/Dead assay, and proliferation was determined according to BrdU incorporation. Addnl. the endothelium of donor corneas was incubated with F6H8 for 5 days and endothelial cell morphol. was documented. Results. After 5 days incubation with F6H8, cultures of RPE and HCEC showed significantly lower extinctions for vital cells as well as a non-significant decrease in proliferation compared with controls. Anal. by means of fluorescence microscopy after treatment with F6H8 or perfluorodecaline revealed decreased cell densities (F6H8 > perfluorodecaline) within contact areas. The endothelium of donor corneas incubated in presence of F6H8 developed circumscribed necrotic areas. Conclusions. Decreased amts. of vital cells cannot be explained solely by mech. effects or nutritional deficit due to direct contact, since F6H8 has a lower sp. weight than perfluorodecaline. The ability of the remaining cells to proliferate revealed that they were not irreversibly damaged. Due to the high lipophilicity of F6H8 interactions with cellular lipoprotein membranes as well as other toxic effects have to be considered and should further be investigated prior to clin. use.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 17 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:950352 HCAPLUS

DOCUMENT NUMBER: 139:235265

TITLE: Clinical findings on the use of long-term heavy tamponades (semifluorinated alkanes and their oligomers) in complicated retinal detachment surgery

AUTHOR(S): Roeder, Johann; Hoerauf, Hans; Kobuch, Karin; Gabel, Veit-Peter

CORPORATE SOURCE: Franz-Josef Strauss-Allee 11, Regensburg, 93042, Germany

SOURCE: Graefe's Archive for Clinical and Experimental Ophthalmology (2002), 240(12), 965-971  
CODEN: GACODL; ISSN: 0721-832X

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background. Heavy tamponades for pathologies in the lower part of the retina are a new development, and different tamponades have recently come into clin. use: semifluorinated alkanes (F6H6, F6H8) and their oligomers (OL62HV). Method. Nine patients had been operated on using F6H8 (n=5) and by OL62HV (n=4). In all cases the reasons for using the tamponades were complicated retinal detachments in the lower part. In three cases the use was primary and in six cases tamponades were used after reoperations. In all cases the endotamponade was removed within 6 wk. Fluorescein angiog. (FLA) was performed in the F6H8 group. Results. In the F6H8 group dispersion developed in two of the three aphacic patients. In two out of five cases



soft epiretinal membranes and cellular material could be found between the substance and the lower periphery. In two membranes examined by light microscopy, cystic cells and amorphous material could be found. In one case (PDRP, aphacic) cyclophotocoagulation had to be performed because of persistent elevated IOP. FLA was unremarkable. In the OL62HV group, severe recurrent PVR reaction occurred in the lower periphery (2/4) and unusual ppts. were observed (4/4). In one case, after a normal postoperative period (VA 0.05 after 5 days) an extensive cellular reaction on the complete surface of the tamponade occurred. After 5 wk VA was no light perception. During removal of the oligomer unusual adherent cellular components were found on the surface of the retina. The retina appeared necrotic, showed constricted retinal vessels and there was optic atrophy. Histol., fluffy epiretinal material and a lens capsule obtained from one eye filled with OL62HV resembled the appearance with F6H8. Conclusion. Heavy endotamponades on the basis of semifluorinated alkanes can lead to an unusual biol. reaction and need further investigation before clin. use.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 18 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:52812 HCAPLUS

DOCUMENT NUMBER: 137:135007

TITLE: Effect of perfluorohexyloctane on corneal endothelial cells

AUTHOR(S): Ding, Xiaoyan; Li, Chunfang; Lu, Lin; Feng, Guanguang; Zheng, Huling

CORPORATE SOURCE: Zhongshan Ophthalmic Center, Sun Yat-Sen University of Medical Science, Canton, 510060, Peop. Rep. China

SOURCE: Eye Science (2001), 17(1), 21-26

CODEN: YAXUE3; ISSN: 1000-4432

PUBLISHER: Zhongshan Ophthalmic Center

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effect of the silicone-oil solvent perfluorohexyloctane on the corneal endothelial cells of rabbit eyes was investigated. Rabbits underwent anterior chamber injection of 0.15 mL of the compound. Slit-lamp biomicroscopy and corneal endothelium photog. were performed pre- and postoperatively. Histopathol. examination and transmission electron microscopy were carried out after the rabbits were sacrificed. Four wk after injection, the endothelial cells were markedly irregular in size and shape and the number of endothelial cells was markedly decreased. Multilayered retrocorneal membranes grew gradually 2 wk after surgery. Vacuolar degeneration was seen in some of the endothelial cells. Nuclear degeneration and edema occurred. Corneal endothelial cells degenerated after 2-4-wk contact with perfluorohexyloctane. The compound is not recommended for use as a new intraocular tamponade.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 19 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:42206 HCAPLUS

DOCUMENT NUMBER: 136:74601

TITLE: Agent for intraoperative and temporary postoperative retina tamponade

INVENTOR(S): Danilichev, V. F.; Shishkin, M. M.; Kulikov, A. N.

PATENT ASSIGNEE(S): Russia

SOURCE: Russ., No pp. given

CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| RU 2154483             | C2   | 20000820 | RU 1997-101106  | 19970123 |
| PRIORITY APPLN. INFO.: |      |          | RU 1997-101106  | 19970123 |

AB The invention proposes an agent for intraoperative and temporal postoperative tamponade of the retina. The agent is the highly pure perfluoropolyether 6MF-130 of the general formula  $CF_3O-(CF(CF_3)-CF_2O)_n-C_2F_5$ . The invention enhances tolerance of eye structures, decreases relapse incidence of detached retina and simplifies intraocular manipulations. There is enhanced effectiveness of the agent, decreased incidence of iatrogenic complications, and decreased operation time.

L40 ANSWER 20 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:2513 HCAPLUS

DOCUMENT NUMBER: 137:163743

TITLE: Use of perfluorohexyloctane as a long-term internal tamponade agent in complicated retinal detachment surgery

AUTHOR(S): Kirchhof, Bernd; Wong, David; Van Meurs, Jan; Hilgers, Ralf D.; Macek, Marc; Lois, Noemi; Schrage, Norbert F.  
 CORPORATE SOURCE: Department of Ophthalmology, University of Aachen, Aachen, Germany

SOURCE: American Journal of Ophthalmology (2002), 133(1), 95-101

CODEN: AJOPAA; ISSN: 0002-9394

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB PURPOSE: To report the use of perfluorohexyloctane, a liquid semifluorinated alkane that is heavier than water, as an internal tamponade agent in surgery for complicated retinal detachments. DESIGN: A consecutive interventional case series from 3 study centers. METHODS: In 23 consecutive eyes (23 patients, 19 men and 4 women, mean age of 58.5 yr) perfluorohexyloctane was used for long-term internal tamponade. Included were eyes with complicated retinal detachment involving the lower 2 quadrants of the fundus. Excluded were patients with diseases in the fellow eye or severe systemic disease. A pars plana vitrectomy was performed, including membrane peeling and retinotomy where necessary. RESULTS: The mean duration for perfluorohexyloctane being left in situ was 76 days. Four weeks following the removal of perfluorohexyloctane 19 of the 23 patients had total reattachment of the retina; 3 eyes had a recurrence of retinal detachment. One patient was lost to follow-up. The mean follow-up after perfluorohexyloctane removal was 97 days (range, 48 to 169 days). Cataract formation or progression was noted in 9 of the 10 eyes. There were 2 cases with high intraocular pressures. Dispersion into small droplets was observed as early as 3 days postoperatively in 3 of the 23 patients. At least 12 of the 23 patients had an obvious dispersion by the time of perfluorohexyloctane removal. There was no sign of optic atrophy, retinal necrosis, or retinal vascular occlusion. CONCLUSION: Perfluorohexyloctane was tolerated as a long-term internal tamponade agent without obvious signs of damage to the retina or optic disk. Of all the complications noted, the most common was that of dispersion of the perfluorohexyloctane bubble into droplets.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 21 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:863373 HCAPLUS

DOCUMENT NUMBER: 137:83465

TITLE: New substances for intraocular tamponades:  
Perfluorocarbon liquids, hydrofluorocarbon liquids and  
hydrofluorocarbon-oligomers in vitreoretinal  
surgery

AUTHOR(S): Kobuch, Karin; Menz, Dirk Henning; Hoerauf, Hans;  
Dresp, Joachim Hans; Gabel, Veit-Peter

CORPORATE SOURCE: University Eye Hospital, Franz-Josef-Strauss-Allee 11,  
Regensburg, 93042, Germany

SOURCE: Graefe's Archive for Clinical and Experimental  
Ophthalmology (2001), 239(9), 635-642  
CODEN: GACODL; ISSN: 0721-832X

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Perfluorocarbon liqs. (PFCLs) and heavy fluorocarbon liqs. (HFCLs) are being increasingly used as soft tools during vitreoretinal surgery. However, since long-term intraocular tolerance is still unsatisfactory, at present complete removal at the end of surgery is recommended. With the aim to improve long-term intraocular compatibility and to enlarge the spectrum of clin. applications, modified HFCLs have been developed. HFCL-oligomers with a higher viscosity represent the latest perspective. All three groups of fluorocarbon liqs. will be compared with respect to their phys. and chemical properties, exptl. and clin. results, and prospects for clin. applications. Common features of PFCLs, HFCLs and HFCL-oligomers are biol. inertness, sp. gr. higher than water, immiscibility with water or blood, and a high gas binding capacity. In PFCLs such as decalin, octane, or phenanthrene, all carbon atoms of the carbon backbone are completely fluorinated. In exptl. and clin. use, emulsification, vascular changes and structural alterations of the retina have been described. By only partial replacement of hydrogen atoms by fluorine, the sp. gr. of HFCLs is reduced, whereas lipophilic properties increase. Thus HFCLs are potential solvents for intraocular silicone oil remnants. However, after long-term application, side-effects are similar to those observed with PFCLs. Substances of this group, such as F6H6, F6H8, O44, and O62 are used intraoperatively and are currently being investigated for clin. long-term application. With the aim to avoid emulsification and to improve intraocular tolerance, the authors have developed HFCL-oligomers consisting of 2-4 HFCL mols. with increased viscosity. The oligomers were tolerated well in rabbit eyes for up to 4 mo. In contrast to PFCLs or monomers, they did not emulsify nor show vascular alterations. ERGs returned to normal after removal of the oligomer from the eye. Histol. of the retina showed mild alterations. Conclusion: according to phys. properties, exptl. intraocular compatibility and stability against emulsification, HFCL-oligomers are promising candidates for improved long-term tamponade of the lower retina. At present, indications for an application in human eyes have to be determined in clin. trials.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 22 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:571328 HCAPLUS

DOCUMENT NUMBER: 136:314960

TITLE: Combined use of partially fluorinated alkanes,  
perfluorocarbon liquids and silicone oil: An

experimental study

AUTHOR(S): Hoerauf, Hans; Kobuch, Karin; Dresch, Joachim; Menz, Dirk-Henning

CORPORATE SOURCE: Department of Ophthalmology, University of Lubeck, Lubeck, 23538, Germany

SOURCE: Graefe's Archive for Clinical and Experimental Ophthalmology (2001), 239(5), 373-381  
CODEN: GACODL; ISSN: 0721-832X

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Partially fluorinated alkanes (FALKs) are a new class of substances which can be used in vitreoretinal surgery as an intraoperative tool and as a long-term tamponade. The aim of this in vitro study was (1) to investigate the solubility of FALKs in silicone oil during direct exchange, (2) to study their combined use and solubility in PFCLs (perfluorocarbon liqs.), (3) to evaluate their lipophilic properties and (4) to investigate the possibility of preparing "heavy silicone oil". FALKs dissolved in silicone oil up to the following values: F6H6=45 m%, F6H8=54 m%, O44=100 m%, O62=18 m%. FALKs dissolved in PFCL, thereby changing the physicochem. properties of PFCL depending on the type of FALK and ratio used. The lipophilic properties of FALKs and PFCLs could be characterized by their dissoln. in native olive oil (F6H8=23.4 m%, O44=16.7 m%, F6H6=12.3 m%, O62=5.3 m%, PFD=1.1 m%, PFO=0.6 m%). It was possible to prepare "heavy silicone oil" e.g. by adding 30 vol% F6H8, resulting in a sp. gr. of 1.08 g/mL, or by adding 80 vol% O44, resulting in a sp. gr. of 1.25 g/mL, but decreasing the viscosity of the mixts. dramatically. If FALKs are used as an intraoperative tool, a direct exchange with silicone oil should be avoided owing to their capacity to dissolve in silicone oil, resulting in a mixture with unpredictable properties. A combined use with PFCLs and silicone oil is possible, if the right ratio is chosen. The solubility of FALKs in native olive oil may be an indicator for their tissue penetration and may render feasible their use as a long-term tamponade. "Heavy silicone oil" preparation using FALKs is possible, but the mixture needs further evaluation in terms of emulsification, mobilization of oligosiloxanes, tissue penetration and long-term stability.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 23 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:493432 HCAPLUS

DOCUMENT NUMBER: 136:221666

TITLE: The biocompatibility of silicone, fluorosilicone and perfluorocarbon liquids as vitreous tamponades an ultrastructural and immunohistochemical study

AUTHOR(S): Versura, Piera; Cellini, Mauro; Torreggiani, Alberto; Bernabini, Benedetta; Rossi, Annalisa; Moretti, Marco; Caramazza, Roberto

CORPORATE SOURCE: Centre of Biotechnological and Clinical Research in Ophthalmology, University of Bologna, Bologna, I-40138, Italy

SOURCE: Ophthalmologica (2001), 215(4), 276-283  
CODEN: OPHTAD; ISSN: 0030-3755

PUBLISHER: S. Karger AG

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The interactions occurring at the interface between some currently used vitreous tamponading substances and the ocular tissues were investigated in an early follow-up after surgery. Adult albino rabbit

eyes underwent vitrectomy and were injected intravitreally with silicone oils at 1,000 or 3,000 cSt, fluorosilicone oil and perfluorodecalin. Different morphol. techniques (light microscopy, scanning and electron microscopy, immunohistochem.) were applied. All the tested materials, although non-toxic, penetrate the ocular tissues also at the anterior segment level, and in the long-term follow-up this can yield functional impairment. No massive inflammation has been detected in the zones in contact with the materials, but Igs and complement fractions are anyway present in the stroma of various tissues and around the droplets of emulsified materials, suggesting a local immune reaction. Data from this study confirmed that a permanent vitreous substitute, showing a perfect biocompatibility, still does not exist. The indication to remove the tamponading substance within 2 mo after the surgery emerges from this investigation, confirming previous studies. Despite some neg. features, silicone oil still appears the most biocompatible material for vitreous replacement.

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 24 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:272209 HCAPLUS

DOCUMENT NUMBER: 135:157650

TITLE: Elastic stability of silicone ferrofluid internal tamponade (SFIT) in retinal detachment surgery

AUTHOR(S): Voltairas, P. A.; Fotiadis, D. I.; Massalas, C. V.

CORPORATE SOURCE: Department of Computer Science, University of Ioannina, Ioannina, GR 451 10, Greece

SOURCE: Journal of Magnetism and Magnetic Materials (2001), 225(1-2), 248-255

CODEN: JMMMD; ISSN: 0304-8853

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB It has been argued that silicone ferrofluid internal tamponade (SFIT) can provide (360°) tamponade of the retina in retinal detachment surgery. Provided that the produced SFIT is biocompatible, exact knowledge is needed of its elastic stability in the magnetic field produced by the semi-solid magnetic silicon band (MSB) used as a scleral buckle. We propose a quant., phenomenol. model to estimate the critical magnetic field produced by the MSB that 'closes' retinal tears and results in the reattachment of the retina. The magnetic 'deformation' of SFIT is modeled in accordance with the deformation of a ferrofluid droplet in an external magnetic field.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 25 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:393688 HCAPLUS

DOCUMENT NUMBER: 133:38255

TITLE: Method of preventing proliferation of retinal pigment epithelium by retinoic acid receptor agonists

INVENTOR(S): Campochiaro, Peter A.; Wheeler, Larry A.; Chandraratna, Roshantha A.; Nagpal, Sunil; De Juan, Eugene, Jr.

PATENT ASSIGNEE(S): Allergan, USA; Johns Hopkins University School of Medicine

SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 5,824,685.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| US 6075032  | A    | 20000613 | US 1998-875665  | 19980123 |
| US 5824685  | A    | 19981020 | US 1995-383741  | 19950201 |
| WO 9623498  | A1   | 19960808 | WO 1996-US1505  | 19960131 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI |      |          |                 |          |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE  |      |          |                 |          |
| US 6372753  | B1   | 20020416 | US 2000-536221  | 20000327 |
| US 2002128291   | A1   | 20020912 | US 2001-954686  | 20010911 |
| US 6573271  | B2   | 20030603 |                 |          |

PRIORITY APPLN. INFO.:  
 US 1995-383741 A2 19950201  
 WO 1996-US1505 W 19960131  
 US 1998-875665 A1 19980123  
 US 2000-536221 A1 20000327

AB Proliferation of retinal pigment epithelium following surgery or trauma or resulting in ocular diseases associated with choroidal neovascularization, e.g. age-related macular degeneration and histoplasmosis syndrome, is prevented by contacting retinal pigment epithelium cells with a therapeutic amount of a retinoic acid receptor (RAR) agonist, preferably one with specific activity for retinoic acid receptors. Preferably the RAR agonist is also a potent antagonist of AP1-dependent gene expression. Alternatively, the proliferation of retinal pigment epithelium is ameliorated with a therapeutic amount of an AP-1 antagonist, alone or in combination with an RAR agonist. The drug can be administered by bolus injection into the vitreous cavity using a dosage from about 50 to 150 µg. or by slow release from liposomes or an oil tamponade injected into the vitreous cavity. Formulations for preventing proliferation of retinal pigment epithelium are also provided.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 26 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:177472 HCAPLUS

DOCUMENT NUMBER: 132:325885

TITLE: Biomaterials used in the posterior segment of the eye

AUTHOR(S): Colthurst, M. J.; Williams, R. L.; Hiscott, P. S.; Grierson, I.

CORPORATE SOURCE: Unit of Ophthalmology, Department of Medicine, University of Liverpool, Liverpool, L69 3BX, UK

SOURCE: Biomaterials (2000), 21(7), 649-665

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 132 refs. The treatment of posterior segment eye disease and related conditions has improved greatly in recent years with the advent of new therapies, materials and devices. Vitreoretinal conditions, however, remain significant causes of blindness in the developed world. Biomaterials play a major role in the treatment of many of these disorders and the success rate of vitreoretinal surgery

, especially in the repair of retinal detachment and related conditions, would increase with the introduction of new and improved materials. This review, which focuses on disorders that feature retinal detachment, briefly describes the anatomy of the eye and the nature and treatment of posterior segment eye disorders. The roles, required properties and suitability of the materials used in vitreoretinal surgery as scleral buckles, tamponade agents or drug delivery devices, are reviewed. Exptl. approaches are discussed, along with the methods used for their evaluation, and future directions for biomaterial research in the posterior segment of the eye are considered.

REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 27 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:211039 HCAPLUS

DOCUMENT NUMBER: 131:39665

TITLE: Treatment of early giant retinal tears with perfluorodecalin and perfluoropropane

AUTHOR(S): Xu, Xun; Zhang, Xi; Wu, Naichuan; Ho, Patrick C. P.

CORPORATE SOURCE: Shanghai First People's Hospital, Shanghai Medical University, Shanghai, 200080, Peop. Rep. China

SOURCE: Chinese Medical Journal (Beijing, English Edition) (1999), 112(3), 211-213

CODEN: CMJODS; ISSN: 0366-6999

PUBLISHER: Chinese Medical Association

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Objective: To explore the methods of lens-sparing (without lensectomy), non-silicone oil tamponade and no scleral buckling for treatment of early giant retinal tears. Thirteen cases of early retinal detachment of proliferative vitreoretinopathy (PVR) grade C2-D1, with giant tear extending from 135° to 270° were chosen. Transscleral cryotherapy was first applied to treat each end of the giant tear up to the oral serrate. And then conventional three-port pars plana vitrectomy was performed. Perfluorodecalin liquid was injected to manipulate the flap of the retinal tear. The flap with no cryotherapy before was treated with endolaser or cryotherapy under optimal visual condition, then air-fluid was exchanged completely and C3F8 was injected properly. With a mean follow-up of 8.2 mo, the retina was reattached completely in 12 eyes. Success rate was 92.3%, and visual acuity improved. Most postoperative complications were slight. The retina failed to reattach only in 1 case with severe vitreous blood. In treating early retinal giant tears without severe PVR, the lens-sparing, non-silicone oil tamponade and no scleral bucking are helpful to simplify operation and to improve the success rate of the retinal surgery and to yield satisfactory outcome of visual acuity. Besides, it can also avoid the initial side effects of silicone oil tamponade and diopter irregularity after lensectomy.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 28 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:206640 HCAPLUS

DOCUMENT NUMBER: 131:78407

TITLE: Synthesis of silicone magnetic fluid for use in eye surgery

AUTHOR(S): Dailey, J. P.; Phillips, J. P.; Li, C.; Riffle, J. S.

CORPORATE SOURCE: Division of Ophthalmology, Hamot Medical Center, Erie,

PA, 16507, USA  
 SOURCE: Journal of Magnetism and Magnetic Materials (1999),  
 194(1-3), 140-148  
 CODEN: JMMMD; ISSN: 0304-8853  
 PUBLISHER: Elsevier Science B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Retinal detachment is repaired by external and internal tamponade  
 . There is as yet no direct internal tamponade which provides  
 360° coverage to the retina. With a magnetized encircling scleral  
 buckle, magnetic fluids would provide 360° encircling internal  
 tamponade. Our magnetic fluid is a dispersion of ultrafine (4-10  
 nm) magnetic particles in silicone secured with triblock copolymer steric  
 stabilizers. Triblock copolymers are good steric stabilizers for  
 suspensions of  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> powder in octamethylcyclotetrasiloxane (D4).  
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 29 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:588751 HCAPLUS  
 DOCUMENT NUMBER: 125:212709  
 TITLE: Method of preventing proliferation of retinal pigment  
 epithelium by retinoic acid receptor agonists  
 INVENTOR(S): Campochiaro, Peter A.; Wheeler, Larry A.;  
 Chandraratna, Roshantha A.; Nagpal, Sunil; De Juan,  
 Eugene, Jr.  
 PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, USA  
 SOURCE: PCT Int. Appl., 70 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE        |
|---|------|----------|-----------------|-------------|
| WO 9623498  | A1   | 19960808 | WO 1996-US1505  | 19960131    |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI |      |          |                 |             |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE  |      |          |                 |             |
| US 5824685  | A    | 19981020 | US 1995-383741  | 19950201    |
| CA 2209303  | AA   | 19960808 | CA 1996-2209303 | 19960131    |
| AU 9647070  | A1   | 19960821 | AU 1996-47070   | 19960131    |
| EP 804194   | A1   | 19971105 | EP 1996-902791  | 19960131    |
| EP 804194   | B1   | 20050330 |                 |             |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE   |      |          |                 |             |
| JP 11503998   | T2   | 19990406 | JP 1996-523769  | 19960131    |
| AT 291915   | E    | 20050415 | AT 1996-902791  | 19960131    |
| US 6075032  | A    | 20000613 | US 1998-875665  | 19980123    |
| US 6071924  | A    | 20000606 | US 1998-175192  | 19981020    |
| US 6372753  | B1   | 20020416 | US 2000-536221  | 20000327    |
| US 2002128291   | A1   | 20020912 | US 2001-954686  | 20010911    |
| US 6573271  | B2   | 20030603 |                 |             |
| PRIORITY APPLN. INFO.:  |      |          | US 1995-383741  | A2 19950201 |
|   |      |          | WO 1996-US1505  | W 19960131  |
|   |      |          | US 1998-875665  | A1 19980123 |
|   |      |          | US 2000-536221  | A1 20000327 |



AB Proliferation of retinal pigment epithelium (RPE) following surgery or trauma or resulting in ocular diseases associated with choroidal neovascularization, such as age related macular degeneration and histoplasmosis syndrome, is prevented by contacting retinal pigment epithelium cells with a therapeutic amount of a retinoic acid receptor (RAR) agonist, preferably one with specific activity for retinoic acid receptors. Preferably the RAR agonist is also a potent antagonist of AP1-dependent gene expression. Alternatively, the proliferation of retinal pigment epithelium is ameliorated with a therapeutic amount of an AP-1 antagonist, alone or in combination with an RAR agonist. The drug can be administered by bolus injection into the vitreous cavity using a dosage from about 50-150 µg, or by slow release from liposomes or an oil tamponade injected into the vitreous cavity. Formulations for preventing proliferation of retinal pigment epithelium are also provided. The potency of retinoid agonists on serum stimulated DNA synthesis in human RPE cells was tested and dose-dependent inhibition was observed in cells incubated for 7 days with all-trans- and 9-cis-retinoic acids.

L40 ANSWER 30 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:146351 HCAPLUS

DOCUMENT NUMBER: 124:270432

TITLE: An in-vivo study on ocular tolerance of fluorosilicone oil and perfluorotributylamine for intraocular surgical use

AUTHOR(S): Nishimura, Akira

CORPORATE SOURCE: Sch. Med., Kanazawa Univ., Kanazawa, 920, Japan

SOURCE: Kanazawa Daigaku Juzen Igakkai Zasshi (1995), 104(5), 563-89

CODEN: JUZIAG; ISSN: 0022-7226

PUBLISHER: Juzen Igakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB The potential of fluorosilicone oil (FSiO) and perfluorotributylamine (PFTA) with higher sp. gr. than water as vitrectomy vitreous substitutes was examined in dogs and cats in vivo. The effects of FSiO and PFTA on the sensory retina and the retinal pigment epithelium were monitored by electroretinogram (ERG), hyperosmolarity response from the retinal pigment epithelium, visually evoked potential (VEP) and histol. A 6-wk retention of FSiO in the vitreous cavity caused no conspicuous change in the a-wave (in dogs and cats), the b-wave (in dogs and cats), the c-wave (seen only in cats), the slow neg. potential (SNP, seen only in dogs), the oscillatory potentials (in dogs and cats), the light rise (in dogs and cats), the hyperosmolarity response (tested only in dogs) and retinal histol. (in dogs and cats). One-thousand-cs FSiO and 300-cs FSiO were removable from the eye with equal ease. A 60-wk intraocular retention of FSiO caused no change attributable to the retention period in the a-wave (in dogs and cats), the b-wave (in dogs and cats), the c-wave (seen only in cats), the SNP (seen only in dogs), the oscillatory potentials (in dogs and cats), the light rise (in dogs) and the hyperosmolarity response (tested only in dogs) and retinal histol. (in dogs and cats), but the peak latency of the light rise (in cats) was prolonged 30, 42, 48, 54 and 60 wk after surgery. Intraocular retention of FSiO for 30 to 40 wk or longer exerts a toxic effect on the cat retinal pigment epithelium and/or outer nuclear layer. A 120-wk intraocular retention of FSiO caused no conspicuous change in the VEP in 1 cat. A 2-to-3 h intraocular tamponade with PFTA in canine eyes without posterior vitreous detachment (PVD) and in feline eyes with PVD caused no conspicuous change in the a-wave (in dogs and cats), the b-wave (in dogs and cats), the c-wave (seen only in cats),

the SNP (seen only in dogs), the oscillatory potentials (in dogs and cats), the light rise (in dogs and cats), the hyperosmolarity response (tested only in dogs) and the retinal histol. The retinal integrity is well preserved after long-term vitreous substitution by FSiO of after intraoperative vitreous substitution by PFTA, giving a rationale for utilizing these substances as a vitreous tamponade.

L40 ANSWER 31 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:8925 HCAPLUS  
DOCUMENT NUMBER: 124:135414  
TITLE: Silicone oil in repair of retinal detachments caused by necrotizing retinitis in HIV infection  
AUTHOR(S): Davis, Janet L.; Serfass, Michelle S.; Lai, Mei-Ying; Trask, Douglas K.; Azen, Stanley P.  
CORPORATE SOURCE: Bascom Palmer Eye Institute, University Miami, FL, USA  
SOURCE: Archives of Ophthalmology (Chicago) (1995), 113(11), 1401-9  
CODEN: AROPAW; ISSN: 0003-9950  
PUBLISHER: American Medical Association  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The objective was to evaluate the safety and efficacy of 1000- and 5000-centistoke silicone oil as retinal tamponades for the treatment of retinal detachments secondary to necrotizing retinitis in patients with human immunodeficiency virus (HIV) infection. Three hundred fifty patients with HIV infection, who had 407 eyes with retinal detachments secondary to necrotizing retinitis we tested. Intervention included vitrectomy surgery for retinal detachment with 1000- or 5000-centistoke silicone oil as the retinal tamponade. Efficacy was measured both by anat. success (defined as complete retinal attachment or macular attachment) and by visual acuity success (defined as preservation of visual acuity or ambulatory vision). Safety was determined by the rate of complications, including abnormal intraocular pressure and corneal and lens opacification. At the last follow-up examination, the retina was completely attached in 287 (73%) of 393 eyes, the macula was attached in 370 eyes (94%), 268 eyes (68%) had ambulatory vision, and visual acuity was preserved in 219 (56%) of 388 eyes. Corneal opacification, hypotony, and silicone oil emulsification were present in 4%, 2%, and 1% of eyes, resp. One eye had elevated intraocular pressure. Of the 57 patients who had both eyes treated, 35 died, of whom four (11%) had nonambulatory vision in both eyes. Of the 293 patients who had one eye treated, 122 died, of whom 44 (36%) died with nonambulatory vision in the treated eye. The median time to cataract was 192 days; to nonambulatory vision, 474 days; and to death, 204 days. Silicone oil repair of retinal detachments in necrotizing retinitis is an efficacious and safe procedure that delays or prevents loss of vision in advanced HIV disease.

L40 ANSWER 32 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:873434 HCAPLUS  
DOCUMENT NUMBER: 123:296583  
TITLE: Histopathology of rabbit eyes with silicone-fluorosilicone copolymer oil as six months internal retinal tamponade  
AUTHOR(S): Doi, Motoaki; Refojo, Miguel F.  
CORPORATE SOURCE: The Schepens Eye Research Institute, Harvard Medical School, Boston, MA, USA  
SOURCE: Experimental Eye Research (1995), 61(4), 469-78  
CODEN: EXERA6; ISSN: 0014-4835

PUBLISHER: Academic  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Silicone-fluorosilicone copolymer oil has low viscosity (175-185 cSt) and is heavier than water (d., 1.16 g cm<sup>-3</sup>). Short term retinal tolerance (within 2 mo) of the silicone-fluorosilicone copolymer oil has been reported to be the same as that of currently used intraocular silicone oil. Ocular response of the purified silicone-fluorosilicone copolymer oil were examined clin. and histopathol. from 2.5 mo to 6 mo after vitreous cavity injection in rabbit phakic eyes, and compared the oil tolerance with that of purified silicone oil (0.97 g cm<sup>-3</sup>, 5000 cSt). The effects in anterior chamber also were examined within 4 wk of the silicon-efluorosilicone copolymer oil injection in different rabbits. Silicone-fluorosilicone copolymer oil recovered from the vitreous cavity at 6 mo was analyzed for cholesterol and retinol content by high performance liquid chromatog. Because of its low viscosity, silicone-fluorosilicone copolymer oil was easy to inject and remove from the vitreous cavity with a 20-G needle. After the vitreous injection, discrete droplet formation by the silicone fluorosilicone copolymer oil occurred more easily than by silicone oil. Medullary ray detachment was seen in a silicone oil-, and some silicone-fluorosilicone copolymer oil-injected eyes at 4-6 mo. Histopathol., after 3-6 mo disappearance of outer plexiform layer and disorganization of the photoreceptor layer of silicone oil-, and silicone-fluorosilicone copolymer oil-injected eyes were seen in the superior and the inferior retina, resp. Migration of the photoreceptor cell nuclei to the photoreceptor layer was found in the inferior retina of silicone-fluorosilicone copolymer oil-injected eyes at 5-6 mo. Small droplets ingested by mononuclear cells were found in the vitreous cavity or preretina at 4-6 mo in silicone-fluorosilicone copolymer oil-injected eyes. After the anterior chamber injection, silicone-fluorosilicone copolymer oil induced endothelial cell damage in the area where the oil contacted continuously. Retinol and cholesterol were identified in silicone-fluorosilicone copolymer oil removed from the vitreous cavity. Silicone-fluorosilicone copolymer oil may be useful as an intraoperative device in retinal detachment surgery and as a short term (up to about 2 mo) retinal tamponade but we do not recommend it for long term retinal tamponade.

L40 ANSWER 33 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:311449 HCAPLUS

DOCUMENT NUMBER: 122:96459

TITLE: Histopathology of rabbit eyes with intravitreous silicone-fluorosilicone copolymer oil

AUTHOR(S): Doi, Motoaki; Refojo, Miguel F.

CORPORATE SOURCE: The Schepens Eye Research Institute, Harvard Medical School, Boston, MA, USA

SOURCE: Experimental Eye Research (1994), 59(6), 737-46  
 CODEN: EXERA6; ISSN: 0014-4835

PUBLISHER: Academic

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Silicone-fluorosilicone copolymer oil is characterized by being heavier than water (d., 1.16 g cm<sup>-3</sup>) and low viscosity (175-185 cSt) compared with currently used intraocular silicone oils (d., 0.97 g cm<sup>-3</sup> and 1000-5000 cSt). This oil is potentially useful as an operative tool and a tamponade on the inferior retina in complicated retinal detachment. The authors evaluate the ocular response clin. and histopathol. within 8 wk in rabbit phakic eyes to the purified silicone-fluorosilicone copolymer oil after vitreous cavity injection, and

compared the oil tolerance with purified silicone oil (0.97 g cm<sup>-3</sup>, 5000 cSt) and perfluorotetradecahydrophenanthrene for ophthalmic use (Vitreon, 2.03 g cm<sup>-3</sup>, 8.03 cSt) which are currently used as operative tools and as internal retinal tamponade agents in retinal detachment surgery. Because of their low viscosity, silicone-fluorosilicone copolymer oil and perfluorotetradecahydrophenanthrene were easier to inject into the eye than silicone oil. Silicone-fluorosilicone copolymer oil and perfluorotetradecahydrophenanthrene occupied the inferior portion in the eye, and silicone oil occupied the superior portion. Fewer discrete oil droplets and weaker vessel attenuation of medullary rays than in the perfluorotetradecahydrophenanthrene-injected eyes were seen in silicone-fluorosilicone-copolymer-oil-injected eyes. Histopathol., all retinas injected with silicone-fluorosilicone copolymer oil were normal within 4 wk. The silicone-fluorosilicone copolymer oil dispersion did not induce histopathol. changes within 8 wk. However, thinning or disappearance of the outer plexiform layer was seen in the inferior retina in some silicone-fluorosilicone-copolymer-oil-injected eyes at 6-8 wk. A similar effect was found in the superior retina of a silicone-oil-injected eye at 8 wk. More severe changes such as thinning or disappearance of the outer plexiform layer, thinning and disorganization of the photoreceptor layer, and migration of the receptor cell nuclei to the photoreceptor layer were found in the inferior retina of perfluorotetradecahydrophenanthrene-injected eyes after 2 wk. Intraocular silicone-fluorosilicone copolymer oil tolerance until about 2 mo post-injection is similar to silicone oil and better than perfluorotetradecahydrophenanthrene. Silicone-fluorosilicone copolymer oil may be useful intraoperatively and as a temporary vitreous substitute in cases of inferior retinal detachment.

L40 ANSWER 34 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:634139 HCAPLUS  
DOCUMENT NUMBER: 119:234139  
TITLE: Treating agent for ophthalmology and its use  
INVENTOR(S): Meinert, Hasso  
PATENT ASSIGNEE(S): Pharmpur GmbH, Germany  
SOURCE: Eur. Pat. Appl., 8 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| EP 563446   | A1   | 19931006 | EP 1992-120354  | 19921127   |
| EP 563446   | B1   | 19970514 |                 |            |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE |      |          |                 |            |
| DE 4211958  | A1   | 19931021 | DE 1992-4211958 | 19920409   |
| AT 152909   | E    | 19970515 | AT 1992-120354  | 19921127   |
| ES 2103871  | T3   | 19971001 | ES 1992-120354  | 19921127   |
| PRIORITY APPLN. INFO.:  |      |          | DE 1992-4210846 | A 19920401 |
|   |      |          | DE 1992-4211958 | A 19920409 |

OTHER SOURCE(S): MARPAT 119:234139

AB Modified alkanes, alkylene glycols, and polyoxyalkylenes with terminal CF<sub>3</sub> or other perfluoroalkyl groups are useful in eye surgery, e.g. as vitreous body substitutes and for re-emplacment and permanent tamponade of detached retinas (no data). These compds., having no CHF group next to a CF<sub>2</sub> group, cannot eliminate HF and thus are completely nontoxic and chemical inert, but have a lower d. (1.2-1.5 g/cm<sup>3</sup>) than

perfluorocarbons.

L40 ANSWER 35 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:463912 HCAPLUS  
DOCUMENT NUMBER: 111:63912  
TITLE: The rate of sulfur hexafluoride escape from a plastic syringe  
AUTHOR(S): Humayun, Mark S.; Yeo, Julia Haller; Koski, Walter S.; Michels, Ronald G.  
CORPORATE SOURCE: Sch. Med., Johns Hopkins Univ., Baltimore, MD, USA  
SOURCE: Archives of Ophthalmology (Chicago, IL, United States) (1989), 107(6), 853-4  
CODEN: AROPAW; ISSN: 0003-9950  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB SF6 gas is widely used for internal tamponade during retinal reattachment surgery and is commonly injected into the eye from a 10-mL plastic syringe. The percentage of SF6 gas in a 10-mL plastic syringe was determined by gas chromatog. and confirmed by IR spectrometry. Measurements were obtained immediately after aspiration, and at 30 s and 10, 15, 60, 90, and 120 min, and 18 h. A marked decrease in SF6 concentration, from 97% at 30 s to 76% at 60 min and 2% at 18 h, was noted. The results were highly reproducible. SF6 gas should be injected into the patient's eye as soon as possible after aspiration from the tank to ensure accurate concns.

L40 ANSWER 36 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1983:191731 HCAPLUS  
DOCUMENT NUMBER: 98:191731  
TITLE: Perfluoro-n-butane. A gas for a maximum duration retinal tamponade  
AUTHOR(S): Lincoff, Andrew; Lincoff, Harvey; Iwamoto, Takeo; Jacobiec, Frederick; Kreissig, Ingrid  
CORPORATE SOURCE: Dep. Ophthalmol., New York Hosp., New York, NY, 10021, USA  
SOURCE: Archives of Ophthalmology (Chicago, IL, United States) (1983), 101(3), 460-2  
CODEN: AROPAW; ISSN: 0003-9950  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB In rabbit eye perfluoro-n-butane (C4F10) [355-25-9] expanded more and remained in the eye longer than any gas previously reported. A 0.3-mL bubble expanded 5-times and displaced the entire rabbit vitreous in 3 days. The volume of the bubble began to shrink after 1 wk, but still filled >50% of the eye at 3 wk. The time for total disappearance was >3 mo.

L40 ANSWER 37 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:67053 HCAPLUS  
DOCUMENT NUMBER: 78:67053  
TITLE: In vivo effects of air and sulfur hexafluoride gas on rabbit corneal endothelium  
AUTHOR(S): Van Horn, Diane L.; Edelhauser, Henry F.; Aaberg, Thomas M.; Pederson, Harlan J.  
CORPORATE SOURCE: Dep. Ophthalmol., Med. Coll. Wisconsin, Milwaukee, WI, USA  
SOURCE: Investigative Ophthalmology (1972), 11(12), 1028-36  
CODEN: INOPAO; ISSN: 0020-9988  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Bubbles of air injected into the anterior chamber of rabbit eyes persisted for 1-3 days, gradually decreasing in size, but bubbles of sulfur hexafluoride [2551-62-4] initially expanded and then gradually decreased in size over a 3-5 day period. On injection of the bubbles, an orange peel-like pattern was observed on the posterior corneal surface overlying both the air and SF6 bubbles, and thickened areas in the endothelium composed of multilayers of new cells and Descemet's membrane-like material were present. After reabsorption of the bubbles, the orange peel-like pattern disappeared, the old endothelial cells degenerated, the new Descemet's membrane became incorporated into the old, and new endothelial cells formed a monolayer covering the posterior surface.

=> => D STAT QUE L41

L36 197 SEA FILE=HCAPLUS ABB=ON PLU=ON TAMPONADE  
 L37 128496 SEA FILE=HCAPLUS ABB=ON PLU=ON OPTHALMI? OR EYE  
 L38 72 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L37  
 L39 55042 SEA FILE=HCAPLUS ABB=ON PLU=ON SURGERY/CV OR ?SURGER?  
 L40 37 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L39  
 L41 13 SEA FILE=HCAPLUS ABB=ON PLU=ON (L36(L) L39) NOT L40

=> D IBIB ABS L41 1-13

L41 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:980230 HCAPLUS

TITLE: Flexible artificial lens surface-modified with phospholipids, and its production method

INVENTOR(S): Yao, Ke; Huang, Xiaodan

PATENT ASSIGNEE(S): The Second Affiliated Hospital, Zhejiang University School of Medicine, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO.  | DATE     |
|------------------------|------|----------|------------------|----------|
| CN 1701769             | A    | 20051130 | CN 2005-10050022 | 20050609 |
| PRIORITY APPLN. INFO.: |      |          | CN 2005-10050022 | 20050609 |

AB The invention provides a flexible foldable intraocular lens used for artificial lens implantation in small-incision cataract extraction by phacoemulsification. The artificial lens comprises an optical portion made of hydrophobic flexible transparent polymer and fillets, wherein the optical portion and the fillets are coated with a layer of phospholipid monomer. The production method comprises processing hydrophobic flexible transparent polymer into artificial lens, exposing to glow discharge in a plasma generator for 2-5 min, soaking in an aqueous solution containing 10-30

g/L

phospholipids for 12 h, placing in the plasma generator where polymerization proceeds for 1-20 min, washing with triply distilled water for 72 h, vacuum-drying, and wrapping in sealed package. The inventive flexible artificial lens has good bioavailability, so the complications after cataract surgery can be alleviated. Addnl., it has reduced adhesiveness to silicone oil, thus it is suitable for patients receiving vitreoretinal surgery with silicone oil tamponade or with high risk of vitreoretinopathy (e.g. high myopia and diabetic

oculopathy).

L41 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:701030 HCAPLUS  
 TITLE: Treatment of Coronary Artery Perforations Complicating Percutaneous Coronary Intervention With a Polytetrafluoroethylene-Covered Stent Graft  
 AUTHOR(S): Lansky, Alexandra J.; Yang, Yi-ming; Khan, Yosef; Costa, Ricardo A.; Pietras, Cody; Tsuchiya, Yoshihiro; Cristea, Ecaterina; Collins, Michael; Mehran, Roxana; Dangas, George D.; Moses, Jeffrey W.; Leon, Martin B.; Stone, Gregg W.  
 CORPORATE SOURCE: Cardiovascular Research Foundation, New York, NY, USA  
 SOURCE: American Journal of Cardiology (2006), 98(3), 370-374  
 CODEN: AJCDAG; ISSN: 0002-9149  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Coronary artery perforation is a rare, but dreaded, complication of percutaneous coronary intervention. Conventional treatment, including reversal of anticoagulation and prolonged balloon inflation, is associated with a high incidence of death, Q-wave myocardial infarction, and emergency coronary bypass surgery. Although a number of case reports have demonstrated the feasibility of sealing coronary perforations with synthetic material-covered stent grafts, the efficacy of this treatment has not been reported in a large, multicenter series. We used a retrospective international registry to examine the outcomes of the polytetrafluoroethylene-coated JOSTENT coronary stent graft (CSG) in 41 cases of coronary perforations. Perforations were relatively severe: 16.7% Ellis grade 1, 54.2% grade 2, and 29.1% grade 3. Of the 41 patients, >1/3 (n = 14) experienced life-threatening complications before stent graft implantation, including pericardial tamponade (12.2%), cardiogenic shock (9.8%), and cardiac arrest (2.4%). A total of 52 CSGs were used to treat the 41 perforations (mean 1.3 per lesion). All CSGs were placed successfully, with 92.9% of the perforations sealed completely and 7.1% partially. One patient developed abrupt vessel closure after CSG deployment, resulting in an overall procedure success rate of 96.4%. No in-hospital Q-wave myocardial infarctions, emergency coronary bypass surgeries, or deaths resulted. The CSG may be a reliable and highly effective treatment option for sealing coronary perforations complicating percutaneous coronary interventions.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:294665 HCAPLUS  
 DOCUMENT NUMBER: 145:224586  
 TITLE: Evaluation of FloSeal as a potential intracavitary hemostatic agent  
 AUTHOR(S): Klemcke, Harold G.  
 CORPORATE SOURCE: U.S. Army Institute of Surgical Research, Fort Sam, Houston, TX, USA  
 SOURCE: Journal of Trauma: Injury, Infection, and Critical Care (2006), 60(2), 385-389  
 CODEN: JOTRFA; ISSN: 1079-6061  
 PUBLISHER: Lippincott Williams & Wilkins  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Background: Noncompressible hemorrhage is a major cause of death in combat and civilian trauma. When surgery is unavailable, one potential

solution to such hemorrhage might be the introduction of an agent into the closed body cavity to provide hemostasis via a combination of coagulative and tamponade effects. FloSeal is an agent containing collagen and thrombin with proven hemostatic efficacy when applied with manual pressure to a bleeding site. The current studies were conducted to analyze the ability of FloSeal to reduce blood loss and increase survival time when applied directly, immediately, and without addnl. pressure to a severe liver injury in rats. Methods: Male rats were anesthetized and catheters were placed in the carotid artery (for measurement of blood pressure) and jugular vein (for resuscitation with lactated Ringers, 3.3 mL/min/kg BW). After midventral laparotomy, the liver was exposed and caudal portions of both medial lobes (.apprx.1% of body weight) were rapidly excised. FloSeal (5 mL, 800 units Thrombin/mL) or vehicle (5 mL, 0.9% NaCl) was directly and immediately applied to the cut liver surface. The abdominal cavity was closed and resuscitation initiated. After hemorrhage-induced death, or after euthanasia at 90 min, fluid loss (blood + resuscitation fluid) was measured. Results: Compared with the control group, direct and immediate application of FloSeal was associated with a reduction in the amts.

of

fluid lost into the abdominal cavity ( $p < 0.01$ ) ( $19.2 \pm 1.5$  vs.  $25.1 \pm 1.5$  g) and enhanced mean arterial pressure at 5, 20, and 30 min after injury ( $p = 0.02$ ), but neither survival time ( $p = 0.12$ ) nor percent survival ( $p = 0.17$ ) differed between treated and control groups. Conclusions: Redns. in fluid loss after liver injury and hemorrhage in FloSeal-treated rats in the absence of addnl. applied pressure are encouraging, and provide evidence for the ability of FloSeal to reduce blood loss when applied immediately and directly to a bleeding tissue.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:53007 HCAPLUS

DOCUMENT NUMBER: 144:135405

TITLE: Absorbable implants for uses in hemostasis and in the treatment of bone defects

INVENTOR(S): Kronenthal, Richard L.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 941,890.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2006013857 | A1   | 20060119 | US 2005-224650  | 20050912 |
| US 2005065214 | A1   | 20050324 | US 2004-941890  | 20040916 |
| AU 2004279319 | A1   | 20050421 | AU 2004-279319  | 20040916 |
| CA 2539568    | AA   | 20050421 | CA 2004-2539568 | 20040916 |
| EP 1677664    | A2   | 20060712 | EP 2004-781435  | 20040916 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR

PRIORITY APPLN. INFO.: US 2003-504978P P 20030923  
US 2004-941890 A2 20040916  
US 2004-628989P P 20041118  
WO 2004-US26738 W 20040916

AB The invention refers to 2 (or more)-component, body-implantable, absorbable, biocompatible, putty, and non-putty hemostatic



tamponades for use in surgery. Component 1 is a finely powdered bulking material, preferably <50  $\mu$ , e.g., calcium, magnesium, aluminum, or barium salts of saturated or unsatd. C6-22 carboxylic acids, hydroxylapatite, DBM, polyglycolide, polylactide, polydioxanones, polycaprolactones, absorbable glasses, gelatin, collagens, mono, and polysaccharides starches. Component 2, a dispersing vehicle, may contain N-alkylpyrrolidones (C1-12 alkyl) and a biocompatible liquefying agent. Thus, a formulation contained calcium stearate 4.0, N-methylpyrrolidone 4.0, and gelatin 6.0 g.

L41 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:9710 HCAPLUS

DOCUMENT NUMBER: 144:94468

TITLE: Absorbable putty-like implants and methods for their use for mechanical hemostasis of bone and for the treatment of osseous defects

INVENTOR(S): Kronenthal, Richard L.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|---------------|--|----------|-----------------|----------|
| US 2006002976 | A1   | 20060105 | US 2004-941889  | 20040916 |
| AU 2004279320 | A1   | 20050421 | AU 2004-279320  | 20040916 |
| CA 2539635    | AA   | 20050421 | CA 2004-2539635 | 20040916 |
| WO 2005034816 | A1   | 20050421 | WO 2004-US26739 | 20040916 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
| RW:           | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |
| EP 1677708    | A1   | 20060712 | EP 2004-781436  | 20040916 |
| R:            | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK   |          |                 |          |

PRIORITY APPLN. INFO.: US 2003-504979P P 20030923  
WO 2004-US26739 W 20040916

AB Two (or more)-component, body-implantable, absorbable, biocompatible, putty-like surgical mech. hemostatic tamponades for use in surgery are provided. The hemostatic tamponades comprises (i) Component 1, a carboxylic acid salt bulking material preferably < 50  $\mu$ , preferably the calcium, magnesium, zinc, aluminum, lithium or barium salts of saturated or unsatd. carboxylic acids containing about 6 to 22 carbon atoms, and (ii) Component 2, a dispersing vehicle, may be esters of C8-18 monohydric alcs. with C2-6 aliphatic monocarboxylic acids; C2-18 monohydric alcs. with polycarboxylic acids; C8-30 monohydric alcs.; tocopherol and esters thereof with C2-10 aliphatic monocarboxylic acids or polycarboxylic acids; absorbable C10-14 hydrocarbons; free carboxylic acids such as oleic, linoleic, caprylic, capric, and lauric; dialkyl.

ethers; alkyl aryl ethers; dialkyl ketones and alkyl aryl ketones; polyhydroxy compds. and esters and ethers thereof; and oils, such as olive and castor oils and triglycerides. For example, a composition was prepared by mech. blending of calcium stearate 4 g (Component 1), tocopheryl acetate 3 g (Component 2) and gelatin 3 g (absorption accelerant), yielding a putty-like mass with excellent phys. and hemostatic characteristics and water resistance properties, i.e., it resisted strongly attempts at washing it away under the force of flowing tap water.

L41 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STM

ACCESSION NUMBER: 2005:259691 HCAPLUS

DOCUMENT NUMBER: 142:322838

TITLE: Absorbable implants and their uses in hemostasis and in the treatment of osseous defects

INVENTOR(S): Kronenthal, Richard L.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 28 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE        |
|---|------|----------|-----------------|-------------|
| US 2005065214   | A1   | 20050324 | US 2004-941890  | 20040916    |
| AU 2004279319   | A1   | 20050421 | AU 2004-279319  | 20040916    |
| CA 2539568  | AA   | 20050421 | CA 2004-2539568 | 20040916    |
| WO 2005034726   | A2   | 20050421 | WO 2004-US26738 | 20040916    |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW   |      |          |                 |             |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |             |
| EP 1677664  | A2   | 20060712 | EP 2004-781435  | 20040916    |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR   |      |          |                 |             |
| US 2006013857   | A1   | 20060119 | US 2005-224650  | 20050912    |
| PRIORITY APPLN. INFO.:  |      |          |                 |             |
|   |      |          | US 2003-504978P | P 20030923  |
|   |      |          | US 2004-941890  | A2 20040916 |
|   |      |          | WO 2004-US26738 | W 20040916  |
|   |      |          | US 2004-628989P | P 20041118  |
| AB Two (or more), -component, body-implantable, absorbable, biocompatible, putty, and non-putty hemostatic tamponades for use in surgery. Component 1 is a finely powdered bulking material, preferably <50 $\mu$ , e.g., the calcium, magnesium, aluminum, or barium salts of C6-22 saturated or unsatd. carboxylic acids, hydroxyapatite, DBM, polyglycolide, polylactide, polydioxanone, polycaprolactones, absorbable glasses, gelatin, collagens, mono, and polysaccharides starches. Component 2, a dispersing vehicle, may be esters of C8-18 monohydric alcs. with C2-6 aliphatic monocarboxylic acids; C2-18 monohydric alcs. with polycarboxylic acids; C8-30 monohydric alcs.; tocopherol and esters thereof with C2-10 aliphatic monocarboxylic acids or polycarboxylic acids; absorbable C10-14 hydrocarbons; free carboxylic acids such as oleic, |      |          |                 |             |

capric, and lauric; dialkyl ethers and ketones; alkyl aryl ethers and ketones, polyhydroxy compds. and esters and ethers thereof; (ethylene oxide/propylene oxide copolymers), oils e.g. olive oil, castor oil and triglycerides. Thus, a formulation contained calcium stearate 1, tocopheryl acetate 1, and glycerol 0.25 g.

L41 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:86046 HCAPLUS  
 TITLE: Effusive-constrictive pericarditis  
 AUTHOR(S): Sagrista-Sauleda, Jaume; Angel, Juan; Sanchez, Antonio; Permanyer-Miralda, Gaieta; Soler-Soler, Jordi  
 CORPORATE SOURCE: Servei de Cardiologia, Hospital General, Universitari Vall d'Hebron, Barcelona, Spain  
 SOURCE: New England Journal of Medicine (2004), 350(5), 469-475  
 CODEN: NEJMAG; ISSN: 0028-4793  
 PUBLISHER: Massachusetts Medical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Background: Effusive-constrictive pericarditis is an uncommon pericardial syndrome characterized by concomitant tamponade, caused by tense pericardial effusion, and constriction, caused by the visceral pericardium. We conducted a prospective study of its clin. evolution and management. Methods: From 1986 through 2001, all patients with effusive-constrictive pericarditis were prospectively evaluated. Combined pericardiocentesis and cardiac catheterization were performed in all patients, and pericardiectomy was performed in those with persistent constriction. Follow-up ranged from 1 mo to 15 yr (median, 7 yr). Results: A total of 1184 patients with pericarditis were evaluated, 218 of whom had tamponade. Of these 218, 190 underwent combined pericardiocentesis and catheterization. Fifteen of the, itients had effusive-constrictive pericarditis and were included in the study. All patieits presented with clin. tamponade; however, concomitant constriction was recognized in only seven patients. At catheterization, all patients had elevated intrapericardial pressure (median, 12 mm Hg; interquartile range, 7 to 18) and elevated right atrial and end-diastolic right and left ventricular pressures. After pericardiocentesis, the intrapericardial pressure decreased (median value, -5 mm Hg; interquartile range, -5 to 0), whereas right atrial and end-diastolic right and left ventricular pressures, although slightly reduced, remained elevated, with a dip-plateau morphol. The causes were diverse, and death was mainly related to the underlying disease. Pericardiectomy was required in seven patients, all of whom had involvement of the visceral pericardium. Three patients had spontaneous resolution. Conclusions: Effusive-constrictive pericarditis is an uncommon pericardial syndrome that may be missed in some patients who present with tamponade. Although evolution to persistent constriction is frequent, idiopathic cases may resolve spontaneously. In our opinion, extensive epicardiectomy is the procedure of choice in patients requiring surgery.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:633381 HCAPLUS  
 DOCUMENT NUMBER: 139:154989  
 TITLE: Method and apparatus for improved hemostasis and damage control operations  
 INVENTOR(S): Buckman, Robert F.; Lenker, Jay A.  
 PATENT ASSIGNEE(S): Damage Control Surgical Technologies, Inc., USA  
 SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC..NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE       |
|--|------|----------|-----------------|------------|
| WO 2003065877  | A2   | 20030814 | WO 2003-US3287  | 20030204   |
| WO 2003065877  | A3   | 20040226 |                 |            |
| W:   |      |          |                 |            |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,    |      |          |                 |            |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,    |      |          |                 |            |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,    |      |          |                 |            |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,    |      |          |                 |            |
| PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,    |      |          |                 |            |
| UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW                                 |      |          |                 |            |
| RW:  |      |          |                 |            |
| GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,    |      |          |                 |            |
| KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,    |      |          |                 |            |
| FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,    |      |          |                 |            |
| BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG         |      |          |                 |            |
| AU 2003225543  | A1   | 20030902 | AU 2003-225543  | 20030204   |
| US 2003176828  | A1   | 20030918 | US 2003-358881  | 20030204   |
| US 6998510   | B2   | 20060214 |                 |            |
| WO 2004041074  | A2   | 20040521 | WO 2003-US35345 | 20031105   |
| W:   |      |          |                 |            |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,    |      |          |                 |            |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,    |      |          |                 |            |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,    |      |          |                 |            |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,    |      |          |                 |            |
| PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,    |      |          |                 |            |
| TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW                     |      |          |                 |            |
| RW:  |      |          |                 |            |
| BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,    |      |          |                 |            |
| BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,    |      |          |                 |            |
| ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,    |      |          |                 |            |
| TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |      |          |                 |            |
| PRIORITY APPLN. INFO.:   |      |          | US 2002-354429P | P 20020204 |
|  |      |          | US 2002-424038P | P 20021105 |
|  |      |          | WO 2003-US3287  | W 20030204 |

AB Devices and methods are disclosed for achieving hemostasis in traumatized patients. Such hemostatic packing devices and methods are especially useful in the emergency, trauma surgery or military setting. In such cases, the patient may have received trauma to abdominal viscera, the thoracic cavity or the periphery. The devices utilize fluid impermeable outer surfaces and distributed pressure to achieve tamponade and hemostasis, primarily by exertion of pressure. The devices come in a variety of configurations including sheet, rolled sheet, folded sheet and polygonal solids including extruded shapes. The devices are capable of serving as carriers for thrombogenic or antipathogenic agents. The devices are flexible, bendable, and conformable in their wet or dry state so that they exert distributed pressure on the wound. Peripheral hemostatic packing devices include optional adhesive hemostatic barriers to cover the entire wound area over the hemostatic pack. The hemostatic packing devices may be placed and removed by open surgery or laparoscopic access without generating excessive re-bleeding, and may further comprise antimicrobial or thrombogenic regions.

L41 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:817704 HCAPLUS

DOCUMENT NUMBER: 137:332904

TITLE: Platelet GP IIb/IIIa receptor blockers for failed thrombolysis in acute myocardial infarction, alone or

as adjunct to other rescue therapies: A single center retrospective analysis of 548 consecutive patients with acute myocardial infarction

AUTHOR(S): Ronner, E.; van Domburg, R. T.; van den Brand, M. J. B. M.; de Feyter, P. J.; Foley, D. P.; van der Giessen, W. J.; Serruys, P. W.; Simoons, M. L.  
 CORPORATE SOURCE: Erasmus Medical Center, Rotterdam, Neth.  
 SOURCE: European Heart Journal (2002), 23(19), 1529-1537  
 CODEN: EHJODF; ISSN: 0195-668X  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB To study the safety of 'rescue' strategies in the treatment of patients with failed thrombolysis, all 548 patients admitted with evolving myocardial infarction to the Thoraxcenter, Rotterdam, from Jan. 1997 until Apr. 1999 were reviewed. Of these patients, 49% had received thrombolysis. Of patients treated with thrombolysis and not referred from other hospitals (n=154) 36% received rescue therapy for failed thrombolysis. Three rescue therapies were used after failed thrombolysis: percutaneous coronary intervention (74%), re-treatment with thrombolysis (39%) and platelet glycoprotein (GP) IIb/IIIa receptor blockers (53%), often in combination. Platelet GP IIb/IIIa receptor blockers were administered in 64% of patients treated with rescue percutaneous coronary intervention. Major bleeding occurred in 14% of all thrombolysis treated patients, and in 30% of patients who received multiple rescue therapies. Bleeding was related to heparin usage and platelet GP IIb/IIIa receptor blockers, as was the insertion of catheters for percutaneous coronary intervention or intra-aortic balloon pumps. Major bleeding resulted in one death due to a ruptured ventricle, one hemorrhagic stroke, and three cases of tamponade for which surgery was needed. Four of these patients had received combination rescue therapy. Rescue therapy is a widely used strategy for failed thrombolysis, but is associated with a high bleeding rate. Alternative reperfusion strategies to avoid failed thrombolysis should be considered in high risk patients.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:488012 HCAPLUS  
 DOCUMENT NUMBER: 132:69281  
 TITLE: The effect of silicone ocular surgical devices on serum IgG binding to silicones  
 AUTHOR(S): Shaikh, Saad; Morse, Lawrence S.; Goldblum, Randall M.; Benner, Jeffrey D.; Burnett, Hal; Caspar, Jeffrey  
 CORPORATE SOURCE: Department of Ophthalmology, University of California, Davis, CA, USA  
 SOURCE: American Journal of Ophthalmology (1998), 126(6), 798-804  
 CODEN: AJOPAA; ISSN: 0002-9394  
 PUBLISHER: Elsevier Science Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The purpose was to determine whether silicone materials used in retinal detachment repair and cataract surgery increase serum IgG binding to silicone and identify correlations with complications of ocular surgery. METHODS: Serum from 49 patients who had ocular surgery using silicone materials was examined. Patient groups included scleral buckling, silicone oil tamponade, scleral buckling and silicone oil tamponade, and silicone lens implants after cataract extraction. Convalescent samples for all patients and

preoperative samples from 19 patients (18 scleral buckling and 1 silicone oil tamponade) were examined. Postoperative complications were monitored for up to 108 mo. Samples were evaluated for the extent of IgG binding to silicones using a micromodification of a previously described ELISA method. RESULTS: In 19 patients, IgG binding levels in preoperative samples were 21 arbitrary units (AU) or less. Of the 25 buckling patients, one developed complications; however, in all patients the postoperative levels of IgG binding to silicone were low (2.2 to 20.0 AU). Although 4 silicone lens patients developed mild complications, none displayed postoperative IgG binding levels of >20 AU. Three patients who underwent both scleral buckling and silicone oil tamponade developed complications; one of these patients, who was also noted to have systemic connective tissue disease, had a significant elevation in postoperative serum IgG binding to silicone. CONCLUSIONS: Statistically significant elevations of serum IgG binding to silicone were noted postoperatively in only one patient who had a systemic connective tissue disease. The complication rate and frequency of enhanced serum IgG binding to silicone was low, making correlation to surgical complications difficult. Examination of matched samples suggested that if ocular exposure to silicone implants enhances the level of serum IgG binding to silicones, it must be a rare event that should not alter the clin. use of these important devices.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:248621 HCAPLUS

DOCUMENT NUMBER: 128:266328

TITLE: Approach to the management of bleeding esophageal varices. Role of somatostatin

AUTHOR(S): Avgerinos, Alec

CORPORATE SOURCE: 2nd Dep. Gastroenterology, Evangelismos Hospital, Athens, 10680, Greece

SOURCE: Digestion (1998), 59(Suppl. 1), 1-22  
CODEN: DIGEBW; ISSN: 0012-2823

PUBLISHER: S. Karger AG

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 72 refs. is given on various treatment strategies used to control variceal bleeding, including drugs, esophageal tamponade, endoscopic sclerotherapy (ES), endoscopic variceal ligation, trans-jugular intrahepatic porto-systemic shunt, and emergency surgery. None of these procedures are ideal and treatment frequently requires a combination of techniques. Sclerotherapy is 1 of the most widely used methods to control variceal bleeding; however, success is largely dependent on an experienced endoscopist. Vasoactive drugs act by decreasing pressure and blood flow in the gastro-esophageal collaterals and they offer the advantage of being administered by inexperienced personnel. Drugs currently used in the treatment of variceal hemorrhage include vasopressin, terlipressin, somatostatin, and octreotide. In the clin. studies to date, somatostatin was more effective than vasopressin and as effective as terlipressin in the control of bleeding esophageal varices (BEV), with an improved safety profile. In contrast, octreotide has shown conflicting results and more data are required to support the drug in this indication. More recently the ABOVE (Acute Bleeding Esophageal Variceal Episodes) study has provided further evidence that early administration of vasoactive drugs such as somatostatin is more effective than placebo in the overall control of acute BEV episodes in cirrhotic patients undergoing ES. Therefore, the administration of a vasoactive drug as early as possible before emergency

sclerotherapy is recommended for the effective management of BEV.

L41 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:70804 HCAPLUS

DOCUMENT NUMBER: 112:70804

TITLE: Increasing atrial pressure during cardiac tamponade does not elevate plasma levels of the peptide ANP in conscious dogs

AUTHOR(S): Klopfenstein, H. Sidney; Mathias, David W.; Bernath, Gregory A.; Cogswell, Terrence L.

CORPORATE SOURCE: Dep. Med., Bowman Gray Sch. Med., Winston-Salem, NC, 27103, USA

SOURCE: Journal of Physiology (Cambridge, United Kingdom) (1990), 421, 309-19

CODEN: JPHYA7; ISSN: 0022-3751

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A conscious euvoletic canine model of cardiac tamponade was used to investigate the roles played by atrial blood pressure, transmural atrial pressure, atrial size, and AVP on atrial natriuretic peptide (ANP) release during cardiac tamponade where the atrial transmural pressure and size decrease as atrial pressure increases. Mongrel dogs were prepared for the chronic measurement of: ascending aortic blood flow (electromagnetic flowmeter); intrapericardial, right atrial and aortic blood pressures, and the evaluation of right atrial size (2-dimensional echocardiog.). After the animals had recovered from surgery, data were collected during progressive cardiac tamponade induced by intrapericardial infusion of warmed saline (20 mL/min) to the point of hemodynamic decompensation. Decompensated cardiac tamponade (DCT) was defined as a decline in mean aortic blood pressure to 70% of the level present when the pericardial space was drained of fluid (baseline) and was produced in all animals within 25 min. Plasma ANP and AVP levels were measured at selected intervals. Cardiac output decreased progressively as intrapericardial pressure, right atrial blood pressure and heart rate increased. Mean aortic blood pressure was well maintained until late in tamponade when it declined rapidly, whereas atrial transmural pressure and atrial size decreased continuously. These hemodynamic changes were associated with stable ANP plasma levels. There was no change in AVP plasma levels from the baseline level of 2.5 pg/mL until the point of DCT when they abruptly increased to 117 pg/mL. The ability to increase ANP plasma levels was confirmed in a subgroup of animals by noting the response to AVP injection. Although the animals were able to increase plasma ANP levels in response to AVP injection (when intrapericardial pressure was normal) and the plasma AVP level was markedly increased late in tamponade, the time course of plasma AVP elevation could not explain why plasma ANP levels did not decrease as atrial transmural pressure and atrial size declined. Thus, although atrial distention and not simply atrial blood pressure must play a dominant role in stimulating ANP release from the atria, decreased atrial size does not result in lowering of plasma ANP levels below baseline levels in this conscious euvoletic canine model.

L41 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:418010 HCAPLUS

DOCUMENT NUMBER: 101:18010

TITLE: Cardiac tamponade and different modes of artificial ventilation

AUTHOR(S): Mattila, I.; Takkunen, Olli; Mattila, P.; Harjula, A.; Mattila, S.; Merikallio, E.

CORPORATE SOURCE: Cent. Hosp., Helsinki Univ., Helsinki, SF-00290/29,

SOURCE: Finland  
Acta Anaesthesiologica Scandinavica (1984), 28(2),  
236-40

CODEN: AANEAB; ISSN: 0001-5172

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB To evaluate the effects of different modes of artificial ventilation and dopamine [51-61-6] on cardiac tamponade, an exptl. study was carried out in mongrel dogs. In pentobarbital-N2O anesthesia, a cardiac tamponade of 20 mmHg was produced by injecting 120-200 mL of normothermic saline into the pericardium. Intermittent pos. pressure ventilation (IPPV) and pos. end-expiratory pressure (PEEP) ventilation with frequencies of 12 and 20 were tested before and after producing the tamponade. Cardiac tamponade produced a fall in arterial pressure and cardiac output, a rise in central venous pressure, and only a slight increase in pulmonary arterial pressure. PEEP with the slower ventilation frequency of 12 produced addnl. falls in cardiac output and systemic arterial pressure, which were not noted with the ventilation frequency of 20 and PEEP. Dopamine infusion increased the cardiac output by increasing the heart rate during tamponade. Evidently, PEEP ventilation with a slow frequency should not be used if cardiac tamponade is suspected after open-heart surgery, and dopamine has a favorable effect on hemodynamics even in the presence of a severe cardiac tamponade.

=> => D STAT QUE L46

L36 197 SEA FILE=HCAPLUS ABB=ON PLU=ON TAMPONADE  
L37 128496 SEA FILE=HCAPLUS ABB=ON PLU=ON OPHTHALMI? OR EYE  
L38 72 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L37  
L39 55042 SEA FILE=HCAPLUS ABB=ON PLU=ON SURGERY/CV OR ?SURGER?  
L40 37 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L39  
L41 13 SEA FILE=HCAPLUS ABB=ON PLU=ON (L36(L)L39) NOT L40  
L44 23 SEA FILE=HCAPLUS ABB=ON PLU=ON "JANI D"/AU OR ("JANI  
DHARMENDRA"/AU OR "JANI DHARMENDRA M"/AU)  
L45 10 SEA FILE=HCAPLUS ABB=ON PLU=ON ("INDRA ERIK"/AU OR "INDRA  
ERIK M"/AU)  
L46 32 SEA FILE=HCAPLUS ABB=ON PLU=ON (L41 OR L44 OR L45) NOT (L40  
OR L41)

=>. D IBIB ABS L46 1-32

L46 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:605498 HCAPLUS

DOCUMENT NUMBER: 145:89955

TITLE: Pharmaceutical delivery systems containing a fused  
pyrrolocarbazole

INVENTOR(S): Bartels, Stephen; Jani, Dharmendra

PATENT ASSIGNEE(S): Bausch & Lomb Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2006134174 | A1   | 20060622 | US 2005-313856  | 20051221 |



## PRIORITY APPLN. INFO.:

US 2004-638764P

P 20041222

## OTHER SOURCE(S):

MARPAT 145:89955

AB The present invention includes a pharmaceutical delivery system comprising a fused pyrrolocarbazole and a biodegradable polymer matrix configured to be inserted into the eye of the patient. In a preferred embodiment, compression methods are used to produce the biodegradable polymer matrixes.

L46 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:340728 HCAPLUS

DOCUMENT NUMBER: 144:357751

TITLE: Eye drug delivery systems containing silicone polymers purified with supercritical fluids

INVENTOR(S): Kunzler, Jay F.; Jani, Dharmendra M.; Salamone, Joseph C.

PATENT ASSIGNEE(S): Bausch &amp; Lomb Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 11 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2006078592 | A1   | 20060413 | US 2005-210124  | 20050823 |
| WO 2006042336 | A2   | 20060420 | WO 2005-US37650 | 20051011 |
| WO 2006042336 | A3   | 20060608 |                 |          |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

## PRIORITY APPLN. INFO.:

US 2004-618038P

P 20041012

## OTHER SOURCE(S):

CASREACT 144:357751

AB A method for making an ocular drug delivery device involves subjecting the device to a supercrit. fluid to remove contaminants from the device. The supercrit. fluid includes supercrit. carbon dioxide. The contaminants include unreacted monomers or oligomers present in the polymeric material used to form the device.

L46 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:322043 HCAPLUS

DOCUMENT NUMBER: 144:338201

TITLE: Composition comprising polyethers for soft, hydrogel contact lenses

INVENTOR(S): Jani, Dharmendra M.; Salamone, Joseph C.; Hu, Zhenze; Xia, Erning; Borazjani, Roya N.; Ammon, Daniel M.

PATENT ASSIGNEE(S): Bausch &amp; Lomb Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 392,743.

CODEN: USXXCO

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2006073185 | A1   | 20060406 | US 2005-285237  | 20051122 |
| US 2004115270 | A1   | 20040617 | US 2002-319132  | 20021213 |
| US 2004186028 | A1   | 20040923 | US 2003-392743  | 20030319 |
| US 7037469    | B2   | 20060502 |                 |          |

PRIORITY APPLN. INFO.: US 2002-319132 A2 20021213  
 US 2003-392743 A2 20030319

AB The present invention relates to a solution for soft, hydrogel contact lenses includes a polyether that is controllably released into an eye's tear film when the lens is worn. Polyether components of the subject solution are released from the soft contact lens material matrix over long time periods to produce longer lasting wetting performance, improved lubricity, improved comfort, and/or reduced feeling of dryness from wearing contact lenses. The solution further includes a cationic polyelectrolyte.

L46 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:11205 HCAPLUS

DOCUMENT NUMBER: 144:94376

TITLE: Xanthan gum viscoelastic composition, method of use and package

INVENTOR(S): Salamone, Joseph C.; Jani, Dharmendra M.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| US 2006002982   | A1   | 20060105 | US 2005-120829  | 20050503 |
| WO 2006012155   | A1   | 20060202 | WO 2005-US22122 | 20050622 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  |      |          |                 |          |

PRIORITY APPLN. INFO.: US 2004-584096P P 20040630

AB The present invention is a novel viscoelastic composition that includes a suitable aqueous carrier and xanthan gum. The novel viscoelastic composition has

rheol. properties consistent with a good dispersive viscoelastic and improved damping ability over com. dispersive viscoelastics. The xanthan gum viscoelastic composition is useful for protecting corneal endothelium of an eye during surgery for inserting an intraocular lens.

L46 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:1050844 HCAPLUS  
 DOCUMENT NUMBER: 143:332659  
 TITLE: Viscoelastic compositions containing free radical scavenger and viscoelastic polymer, methods of use and packaging  
 INVENTOR(S): Bucolo, Claudio; Cro, Melina G.; Maltese, Adriana L. A.; Jani, Dharmendra M.  
 PATENT ASSIGNEE(S): Italy  
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2005215516 | A1   | 20050929 | US 2004-812551  | 20040329 |
| WO 2005097226 | A1   | 20051020 | WO 2005-US9512  | 20050322 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-812551 A 20040329  
 AB The present invention is directed to a viscoelastic composition comprising an aqueous solution having a min. of about 0.01% weight/volume and a maximum of about 20% weight/volume of a viscoelastic polymer based upon the total volume of the viscoelastic composition. Typically, the viscoelastic composition further contains tris[hydroxymethyl]aminomethane and a polyol. The present invention also includes methods of use of the new viscoelastic composition and a packaging device. Thus, viscoelastic composition was prepared containing hyaluronic acid 2.3%, hydroxypropyl methylcellulose 0.8%, sorbitol 4.4%, tris-[hydroxymethyl]aminomethane 20 mM and water to 100%. The formulation containing combination of tris-[hydroxymethyl]aminomethane and sorbitol had best free radical quenching properties.

L46 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:742617 HCAPLUS  
 TITLE: Cosmetic contact lenses  
 AUTHOR(S): Ruscio, Dominic; Salamone, Joseph C.; Jani, D.; Kunzler, Jay F.  
 CORPORATE SOURCE: Research & Development, Bausch & Lomb, Rochester, NY, 14609, USA  
 SOURCE: Abstracts of Papers, 230th ACS National Meeting, Washington, DC, United States, Aug. 28-Sept. 1, 2005 (2005), POLY-675. American Chemical Society: Washington, D. C.  
 CODEN: 69HFCL  
 DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English  
AB Abstract text not available.

L46 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:727475 HCAPLUS  
DOCUMENT NUMBER: 144:398034  
TITLE: Cosmetic contact lenses  
AUTHOR(S): Ruscio, D.; Salamone, J. C.; Jani, D.;  
Kuenzler, J. F.  
CORPORATE SOURCE: Research and Development Bausch and Lomb, Rochester,  
NY, 14609, USA  
SOURCE: Polymer Preprints (American Chemical Society, Division  
of Polymer Chemistry) (2005), 46(2), 507  
CODEN: ACPPAY; ISSN: 0032-3934  
PUBLISHER: American Chemical Society, Division of Polymer  
Chemistry  
DOCUMENT TYPE: Journal; (computer optical disk)  
LANGUAGE: English

AB A new process based on interference coatings of contact lenses to change  
the natural color of the eye has been developed. These coatings have no  
impact on visual performance and do not detract from the natural look of  
the eye. A contact lens is coated with one or more thin optical films,  
which provide a desired spectral reflection characteristic over the entire  
coated portion of the lens. The process can be controlled to produce a  
wide variety of colors. The coating consists of several layers of  
alternating materials, which have different refractive indexes, to form a  
filter that is designed to allow a portion of the visible light to be  
reflected, but at the same time to control the reflectance so that one  
should be able to see through the coating. The number of layers and  
thickness of each layer determine the color and color d. The coating can be  
applied on the lens surface using vacuum evaporation, sputtering, plating or  
plasma enhanced chemical vapor deposition.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:547396 HCAPLUS  
DOCUMENT NUMBER: 143:65495  
TITLE: Drug delivery device comprising a drug core and a drug  
core holder  
INVENTOR(S): Kunzler, Jay F.; Raiche, Adrian; Jani, Dharmendra  
M.  
PATENT ASSIGNEE(S): Bausch & Lomb Inc., USA  
SOURCE: U.S. Pat. Appl. Publ., 6 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE       |
|------------------------|------|----------|-----------------|------------|
| US 2005137538          | A1   | 20050623 | US 2004-6914    | 20041208   |
| PRIORITY APPLN. INFO.: |      |          | US 2003-532027P | P 20031222 |

AB A drug delivery device for placement in the eye includes a drug core  
comprising a pharmaceutically active agent, and a holder that holds the  
drug core. The holder is made of a material impermeable to passage of the  
active agent and includes an opening for passage of the pharmaceutically  
agent therethrough to eye tissue. The device includes a layer of material  
permeable to passage of the active agent. The device further includes a

disk of impermeable material disposed between the drug core and the opening in the holder.

L46 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1080524 HCAPLUS

DOCUMENT NUMBER: 142:62697

TITLE: Rate controlled release of a pharmaceutical agent in a biodegradable polymer device

INVENTOR(S): Shafiee, Afshin; Salamone, Joseph C.; Jani, Dharmendra; Bartels, Stephen Paul; Kunzler, Jay F.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| US 2004253293   | A1   | 20041216 | US 2003-462184  | 20030616   |
| CA 2529501  | AA   | 20041229 | CA 2004-2529501 | 20040615   |
| WO 2004112748   | A2   | 20041229 | WO 2004-US19074 | 20040615   |
| WO 2004112748   | A3   | 20050210 |                 |            |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |            |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
| EP 1641435  | A2   | 20060405 | EP 2004-755319  | 20040615   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK   |      |          |                 |            |
| US 2005031669   | A1   | 20050210 | US 2004-887381  | 20040708   |
| PRIORITY APPLN. INFO.:  |      |          | US 2003-462184  | A 20030616 |
|   |      |          | WO 2004-US19074 | W 20040615 |

AB Chemical erosion controlled release drug delivery systems are provided that allow controlled release of sustained concns. of therapeutic agents within a treated area for a prolonged period of time. The favorable solubility characteristics of the chemical erosion controlled release drug delivery systems are controlled through the hydrophobicity and load level of pharmaceutically active agent or drug. Such controlled solubility characteristics allow for manipulation of the drug release rates depending on the particular therapeutic use and the particular needs of the patient. For example, poly(DL-lactide-co-glycolide) (PLGA)/fluocinolone acetoneide (FA) strands at 35% and 55% loadings were mixed and extruded into cylindrical filaments, each approx. 0.5 mm in diameter. Presence of a hydrophobic compound, fluocinolone acetoneide, in PLGA significantly slowed down the water diffusion rate into the polymer matrix. The surface of the implant also appeared to be smoother than the PLGA implant. Similar release rates per day were observed for both 35% and 55% FA implants during the first 30 days of study which seems to be primarily a diffusion controlled process. The percent cumulative release of FA, based on estimated FA loading, observed so far was significantly less for the 55% implants

relative to the 35% implants.

L46 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:799267 HCAPLUS  
 TITLE: Method for fabricating intraocular lens with  
 peripheral sharp edge  
 INVENTOR(S): Jani, Dharmendra M.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| US 2004188872          | A1   | 20040930 | US 2003-403989  | 20030331 |
| PRIORITY APPLN. INFO.: |      |          | US 2003-403989  | 20030331 |

AB A method of forming the sharp posterior edge of an intraocular lens (IOL) by using a laser to cut or ablate the edge of the IOL substantially cylindrically around the lens axis. The IOL is manufactured with a radius slightly larger than the final lens radius, polished, and then trimmed with the laser to produce the desired final lens shape with the sharp posterior edge. The cutting or ablation process is programmed to avoid damaging the haptic extensions of the lens. The use of a laser cutting or ablation process simplifies and accelerates the production of the lens.

L46 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:780335 HCAPLUS  
 DOCUMENT NUMBER: 141:301507  
 TITLE: Ophthalmic solution for absorption into and controlled release over time from hydrogel biomaterials  
 INVENTOR(S): Hu, Zhenze; Salamone, Joseph C.; Jani, Dharmendra  
 PATENT ASSIGNEE(S): Bausch & Lomb, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 11 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2004186028 | A1   | 20040923 | US 2003-392743  | 20030319 |
| US 7037469    | B2   | 20060502 |                 |          |
| AU 2004224414 | A1   | 20041007 | AU 2004-224414  | 20040318 |
| CA 2519222    | AA   | 20041007 | CA 2004-2519222 | 20040318 |
| WO 2004084960 | A1   | 20041007 | WO 2004-US8237  | 20040318 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,

TD, TG

|  |    |          |                  |             |
|--|----|----------|------------------|-------------|
| EP 1603599   | A1 | 20051214 | EP 2004-757795   | 20040318    |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, |    |          |                  |             |
| IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK     |    |          |                  |             |
| BR 2004008508  | A  | 20060307 | BR 2004-8508     | 20040318    |
| CN 1791435   | A  | 20060621 | CN 2004-80013866 | 20040318    |
| JP 2006520793  | T2 | 20060914 | JP 2006-507301   | 20040318    |
| US 2006073185  | A1 | 20060406 | US 2005-285237   | 20051122    |
| US 2006135381  | A1 | 20060622 | US 2006-355143   | 20060215    |
| PRIORITY APPLN. INFO.:   |    |          | US 2002-319132   | A2 20021213 |
|  |    |          | US 2003-392743   | A 20030319  |
|  |    |          | WO 2004-US8237   | W 20040318  |

AB The present invention is directed to an ophthalmic solution for soft contact lenses for controlled release of polyethers into an eye's tear film. Polyether components of the subject solution are released from the soft contact lens material matrix over long time periods to produce longer lasting wetting performance, improved lubricity, improved end-of-the-day comfort and reduced feeling of dryness from wearing contact lenses. The present invention also includes the use of cationic polyelectrolytes for controlling the swelling of hydrogel contact lenses typically caused by the absorption of high concns. of polyethers. Thus, an ophthalmic lens care multipurpose solution was prepared by mixing boric acid 0.85, monobasic sodium phosphate 0.15, dibasic sodium phosphate 0.31, sodium chloride 0.26, 30% hydroxyalkyl phosphonate 0.1, 20% polyhexamethylene biguanide 1.1 ppm, and Luviquat FC 550 (polyquaternium 10) 0.02 part.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:509025 HCAPLUS

DOCUMENT NUMBER: 141:59780

TITLE: Method for manufacturing ophthalmic lenses

INVENTOR(S): Xia, Erning; Indra, Erik M.; Appleton, William J.; Rastogi, Sanjay; Hall, Kevin; Nandu, Mahendra P.; Ruscio, Dominic V.

PATENT ASSIGNEE(S): Bausch & Lomb Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| US 2004119176   | A1   | 20040624 | US 2002-328364  | 20021223 |
| CA 2511638  | AA   | 20040715 | CA 2003-2511638 | 20031217 |
| WO 2004058489   | A1   | 20040715 | WO 2003-US40300 | 20031217 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
| AU 2003301035   | A1   | 20040722 | AU 2003-301035  | 20031217 |
| EP 1575762  | A1   | 20050921 | EP 2003-814146  | 20031217 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 CN 1732079 A 20060208 CN 2003-80107434 20031217  
 JP 2006511835 T2 20060406 JP 2004-563725 20031217  
 PRIORITY APPLN. INFO.: US 2002-328364 A 20021223  
 WO 2003-US40300 W 20031217  
 AB A method of manufacturing an ophthalmic lens involves contacting the lens with  
 an aqueous solution comprising a surfactant to remove debris from the lens,  
 prior  
 to inspecting and packaging the lens. The aqueous solution may further  
 comprise  
 a buffer and/or sodium chloride. Preferred surfactants include  
 polyoxyethylene-polyoxypropylene block copolymer, nonionic surfactants,  
 such as a Poloxamer or a Poloxamine. The methods may also be employed for  
 addnl. biomedical devices, such as ophthalmic implants. Thus, a  
 formulation contained boric acid 0.64, sodium borate 0.09, sodium chloride  
 0.49, Poloxaine-1107 0.5, and water 98.28%.

L46 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:493477 HCAPLUS  
 DOCUMENT NUMBER: 141:59775  
 TITLE: Absorption and controlled release of polyethers from  
 hydrogel biomaterials  
 INVENTOR(S): Jani, Dharmendra; Salamone, Joseph C.; Hu,  
 Zhenze; Xia, Erning; Borazjani, Roya; Ammon, Daniel M.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 23 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE     |
|--|------|----------|------------------|----------|
| US 2004115270  | A1   | 20040617 | US 2002-319132   | 20021213 |
| CA 2506822   | AA   | 20040701 | CA 2003-2506822  | 20031201 |
| WO 2004055148  | A1   | 20040701 | WO 2003-US38028  | 20031201 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,<br>HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,<br>LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,<br>RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,<br>ZA, ZW |      |          |                  |          |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,<br>BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,<br>ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,<br>TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |          |
| AU 2003293166  | A1   | 20040709 | AU 2003-293166   | 20031201 |
| EP 1570038   | A1   | 20050907 | EP 2003-790155   | 20031201 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                  |          |
| BR 2003017267  | A    | 20051108 | BR 2003-17267    | 20031201 |
| CN 1726274   | A    | 20060125 | CN 2003-80105775 | 20031201 |
| JP 2006509817  | T2   | 20060323 | JP 2004-560342   | 20031201 |
| US 2006073185  | A1   | 20060406 | US 2005-285237   | 20051122 |
| PRIORITY APPLN. INFO.: US 2002-319132 A 20021213<br>US 2003-392743 A2 20030319<br>WO 2003-US38028 W 20031201   |      |          |                  |          |

AB The present invention is directed to an ophthalmic solution for soft contact



lenses for controlled release of polyethers into an eye's tear film. Polyether components of the subject ophthalmic solution are released from the soft contact lens material matrix over long time periods to produce longer lasting wetting performance, improved lubricity, improved end-of-the-day comfort and reduced feeling of dryness from wearing contact lenses. A ophthalmic lens care multipurpose solution containing boric acid 0.85,

monobasic

sodium phosphate 0.15, dibasic sodium phosphate 0.31, sodium chloride 0.26, 30 % hydroxyalkyl phosphonate 0.1, Tetronic 1107 1, Pluronic F127 2, Polymer JR 0.02 %, and 20 % polyhexamethylene biguanide 1.1 ppm was formulated. A Optima FW contact lense material was soaked in the solution for four hours.

L46 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:310991 HCAPLUS

DOCUMENT NUMBER: 140:327151

TITLE: Bacterial attachment reduction to biomaterials and biomedical devices with polyethers

INVENTOR(S): Borazjani, Roya; Ammon, Daniel M., Jr.; Salamone, Joseph C.; Hu, Zhenze; Jani, Dharmendra M.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO. | DATE       |
|------------------------|--|----------|-----------------|------------|
| WO 2004030715          | A1   | 20040415 | WO 2003-US28400 | 20030910   |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |            |
| RW:                    | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |            |
| CA 2500540             | AA   | 20040415 | CA 2003-2500540 | 20030910   |
| AU 2003270504          | A1   | 20040423 | AU 2003-270504  | 20030910   |
| EP 1545641             | A1   | 20050629 | EP 2003-752202  | 20030910   |
| R:                     | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |          |                 |            |
| BR 2003014952          | A  | 20050802 | BR 2003-14952   | 20030910   |
| CN 1684722             | A  | 20051019 | CN 2003-823358  | 20030910   |
| JP 2006509532          | T2   | 20060323 | JP 2004-541524  | 20030910   |
| US 2006205621          | A1   | 20060914 | US 2003-666771  | 20030918   |
| PRIORITY APPLN. INFO.: |  |          | US 2002-414958P | P 20020930 |
|                        |  |          | WO 2003-US28400 | W 20030910 |

AB Compns. for inhibiting attachment of microorganisms to the surface of biomaterials include a polyether, such as a poloxamer. The compns. are especially useful for treating contact lenses to prevent bacterial attachment to the lens. Contact lenses treated with polyethers having a higher percentage of ethylene oxide content, and/or higher HLB coefficient, resulted in lower levels of bacterial attachment to the contact lens.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:68510 HCAPLUS  
DOCUMENT NUMBER: 140:337821  
TITLE: Studies on the immunogenic potential of  
plant-expressed cholera toxin B subunit  
AUTHOR(S): Jani, D.; Singh, N. K.; Bhattacharya, S.;  
Meena, L. S.; Singh, Y.; Upadhyay, S. N.; Sharma, A.  
K.; Tyagi, A. K.  
CORPORATE SOURCE: Department of Plant Molecular Biology, University of  
Delhi South Campus, New Delhi, 110021, India  
SOURCE: Plant Cell Reports (2004), 22(7), 471-477  
CODEN: PCRPD8; ISSN: 0721-7714  
PUBLISHER: Springer-Verlag  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Nicotiana tabacum var. Samsun was transformed via Agrobacterium-mediated transformation with a gene encoding the cholera toxin B subunit (CTB) of Vibrio cholerae, modified to contain a sequence coding for an endoplasmic reticulum retention signal (SEKDEL), under the control of the cauliflower mosaic virus 35S promoter. Total protein from the transgenic leaf tissue was isolated and an aliquot containing 5 µg recombinant CTB was injected intradermally into Balb/c (H2Kd) mice. CTB-specific serum IgG was detected in animals that had been administered plant-expressed or native purified CTB. A T-cell proliferation study using splenocytes and cytokine estns. in supernatants generated by in vitro stimulation of macrophages isolated from the immuno-primed animals was carried out. Inhibition of proliferation of T lymphocytes was observed in splenic T lymphocytes isolated from animals injected with either native or plant-expressed CTB. Macrophages isolated from mice immunized with native or plant-expressed CTB showed enhanced secretion of interleukin-10 but secretion of lipopolysaccharide-induced interleukin-12 and tumor necrosis factor alpha was inhibited. These studies suggest that plant-expressed protein behaved like native CTB with regards to effects on T-cell proliferation and cytokine levels, indicating the suitability of plant expression systems for the production of bacterial antigens, which could be used as edible vaccine. The transgene was found to be inherited in the progeny and was expressed to yield a pentameric form of CTB as evident by its interaction with GM1 ganglioside.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:796547 HCAPLUS  
DOCUMENT NUMBER: 139:297076  
TITLE: Process for extracting biomedical devices  
INVENTOR(S): Indra, Erik M.; Ayyagari, Madhu; Nandu,  
Mahendra P.  
PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
SOURCE: PCT Int. Appl., 20 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2003082367 | A2   | 20031009 | WO 2003-US8994  | 20030321 |

WO 2003082367 A3 20031204  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 US 2003222362 A1 20031204 US 2003-392741 20030319  
 CA 2480577 AA 20031009 CA 2003-2480577 20030321  
 AU 2003222056 A1 20031013 AU 2003-222056 20030321  
 EP 1487511 A2 20041222 EP 2003-718040 20030321  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 JP 2005525590 T2 20050825 JP 2003-579898 20030321  
 PRIORITY APPLN. INFO.: US 2002-368623P P 20020328  
 WO 2003-US8994 W 20030321

AB A process for treating biomedical devices, especially contact lenses, involves contacting polymeric devices containing extractables with a solvent that dissolves and removes the extractables from the devices. The devices are subjected to at least 2 treatments with fresh solvent to remove extractables in the devices. Balafilcon A contact lenses obtained by a cast-molding process were used.

L46 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:757380 HCAPLUS

DOCUMENT NUMBER: 139:265847

TITLE: Supercritical fluid extraction of vitreoretinal silicone tamponades

INVENTOR(S): Kunzler, Jay F.; Salamone, Joseph C.; Jani, Dharmendra; Indra, Erik M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 4 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| US 2003181749   | A1   | 20030925 | US 2002-165834  | 20020607   |
| WO 2003080713   | A1   | 20031002 | WO 2003-US8902  | 20030320   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                 |            |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  |      |          |                 |            |
| AU 2003218343   | A1   | 20031008 | AU 2003-218343  | 20030320   |
| EP 1487903  | A1   | 20041222 | EP 2003-714340  | 20030320   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |            |
| US 2004176628   | A1   | 20040909 | US 2004-801741  | 20040316   |
| PRIORITY APPLN. INFO.:  |      |          | US 2002-366696P | P 20020321 |

US 2002-165834 A 20020607  
WO 2003-US8902 W 20030320

AB A process for the purification of a silicone oil or fluid using neat supercrit. carbon dioxide or a supercrit. carbon dioxide mixture extraction to produce vitreoretinal silicone tamponades. The subject process is an economical, highly effective, reproducible, contaminant-free method by which unreacted relatively low mol. weight cyclic siloxanes and oligomers are removed from relatively high mol. weight silicone oil or fluid.

L46 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:1156 HCAPLUS  
TITLE: Lens with colored portion  
INVENTOR(S): Jani, Dharmendra  
PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
SOURCE: PCT Int. Appl.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|---------------|--|----------|-----------------|----------|
| WO 2003000500 | A1   | 20030103 | WO 2002-US18289 | 20020607 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |          |                 |          |
| RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |

PRIORITY APPLN. INFO.: US 2001-300192P P 20010622

AB A method of making a lens, such as a contact lens with a colored pattern, involves providing a digitized image of the pattern, and transferring the digitized image to a printable image that is printed on a surface of the lens.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:249938 HCAPLUS  
DOCUMENT NUMBER: 136:284499  
TITLE: Method of making ocular devices from a monomer mixture  
INVENTOR(S): Nandu, Mahendra; Jani, Dharmendra M.  
PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
SOURCE: U.S., 8 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| US 6364934 | B1   | 20020402 | US 2000-628974  | 20000731 |
|            |      |          | US 2000-628974  | 20000731 |

AB A method of decreasing the amount of cosmetic defects in contact lenses made from hydrophilic and hydrophobic monomers is described. By filtering the

monomer mixture with a polytetrafluoroethylene (PTFE) membrane filter, the hydrophilic and hydrophobic components are finely dispersed throughout the mixture. Dissolved gases contained within the mixture are also finely dispersed. Contact lenses produced from this method have improved optical quality. For example, monomer mixture was prepared by combining 55 parts by weight TRIS-VC [tris(trimethylsiloxy)silylpropyl methacrylate], 30 parts by weight NVP (N-vinyl pyrrolidone), 15 parts by weight V (a silicone-containing vinyl carbonate), 15 parts by weight 1-nonanol, 1 parts by weight vinal acid (N-vinyloxycarbonylalanine), 0.5 parts by weight Darocur 1173 and 150 ppm by weight tint. Each component was individually weighed and added sequentially to a glass container. Prior to casting, the mixture was passed through a 0.22 µm PTFE in-line filter and immediately cast.

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:380675 HCAPLUS  
DOCUMENT NUMBER: 134:371852  
TITLE: Polymer-based ocular devices  
INVENTOR(S): Nandu, Mahendra; Jani, Dharmendra  
PATENT ASSIGNEE(S): Bausch + Lomb Incorporated, USA  
SOURCE: PCT Int. Appl., 22 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 2001036517   | A2   | 20010525 | WO 2000-US20879 | 20000731 |
| WO 2001036517   | A3   | 20020510 |                 |          |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |          |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |

PRIORITY APPLN. INFO.: US 1999-148252P P 19990811

AB A method of decreasing the amount of cosmetic defects in contact lenses made from hydrophilic and hydrophobic monomers is described. By filtering the monomer mixture with a filter, the hydrophilic and hydrophobic components are finely dispersed throughout the mixture. Dissolved gases contained within the mixture are also finely dispersed. Contact lenses produced from this method have improved optical quality. The monomer mixture comprises a hydrophilic monomer and a hydrophobic monomer such as acrylic-capped siloxane, N-vinylpyrrolidin-2-one or 2-HEMA. The method utilizes a replaceable polytetrafluoroethylene membrane filter.

L46 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:247228 HCAPLUS  
DOCUMENT NUMBER: 134:271321  
TITLE: Process for purifying and reusing solvent used to remove extractables from polymeric devices  
INVENTOR(S): Ayyagari, Madhu; Indra, Erik M.; Nandu, Mahendra P.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl., 15 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|---------------|--|----------|-----------------|----------|
| WO 2001023066 | A1   | 20010405 | WO 2000-US24898 | 20000912 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, TJ, TM   |          |                 |          |
| RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |
| CA 2384652    | AA   | 20010405 | CA 2000-2384652 | 20000912 |
| BR 2000014619 | A  | 20020618 | BR 2000-14619   | 20000912 |
| EP 1229976    | A1   | 20020814 | EP 2000-963363  | 20000912 |
| R:            | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL   |          |                 |          |
| JP 2003510173 | T2   | 20030318 | JP 2001-526272  | 20000912 |
| US 6423820    | B1   | 20020723 | US 2000-667902  | 20000922 |
| US 2002004466 | A1   | 20020110 | US 2001-782318  | 20010213 |
| US 6790816    | B2   | 20040914 |                 |          |
| WO 2002064715 | A2   | 20020822 | WO 2002-US3068  | 20020201 |
| WO 2002064715 | A3   | 20021003 |                 |          |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW |          |                 |          |
| RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |
| AU 2002242070 | A1   | 20020828 | AU 2002-242070  | 20020201 |
| US 2002132971 | A1   | 20020919 | US 2002-145286  | 20020513 |
| US 7022813    | B2   | 20060404 |                 |          |

PRIORITY APPLN. INFO.:  
 US 1999-155967P P 19990924  
 WO 2000-US24898 W 20000912  
 US 2000-667902 A1 20000922  
 US 2001-782318 A 20010213  
 WO 2002-US3068 W 20020201

AB A process for treating biomedical devices, especially contact lenses, involves contacting polymeric devices containing extractables with a solvent that dissolves and thereby removes the extractables from the device, treating the solvent to remove extractables from the solvent, thereby purifying the solvent, and using the purified solvent to remove addnl. extractables from polymeric devices. Thus, the purification of small samples taken from 55 gal of isopropanol that had been used to extract about 6000 polymeric contact lenses was carried out. A 100-mL sample of the spent isopropanol was run through a column, one inch in diameter and two feet in height, packed with about 10 g of 100 mesh carbon. Gas chromatog. and size-exclusion chromatog. were used before and after passage of the sample through the packed carbon column to measure the removal of two major components: a monomeric precursor of the lens polymer and a related low mol.-weight compound

The described treatment resulted in removal of 93.45% of the total of the two monitored extractable components.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:553498 HCAPLUS

DOCUMENT NUMBER: 133:151728

TITLE: Film comprising polyolefin

INVENTOR(S): Thakker, Mahendra T.; Jani, Dharmendra

PATENT ASSIGNEE(S): Huntsman Polymers Corporation, USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE     |
|--|------|----------|------------------|----------|
| WO 2000046025  | A1   | 20000810 | WO 1999-US23589  | 19991008 |
| W: DE, DK, ES, FI, GB, JP, KR, NO  |      |          |                  |          |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |      |          |                  |          |
| TW 548187  | B    | 20030821 | TW 1999-88118128 | 19991020 |

PRIORITY APPLN. INFO.: US 1999-118418P P 19990202

AB A co-extruded multi-layer film product comprises: (a) a core layer having a first side and a second side; (b) a first outer layer disposed on the first side of the core layer; and (c) a second outer layer disposed on the second side of the core layer, wherein the core layer comprises a polyolefin polymer having heat of fusion of 0.4-75 J/g, polydispersity index <10, melt flow rate 0.3-30 g/10 min at 230°, and MEK-soluble fraction content 1-12%. Core layer is made from polyolefin polymers produced by polymerizing an  $\alpha$ -olefin in the presence of a catalyst including: a pro-catalyst having a magnesium halide; an aluminum halide; a tetravalent titanium halide; an electron donor; and a silane having the formula  $R_1R_2Si(OR_3)(OR_4)$ , wherein  $R_1$  and  $R_2$  are each an H, C1-6alkyl, aryl, C5-12cycloalkyl, each of which may be unsubstituted, mono- or di-substituted, and  $R_3$  and  $R_4$  are H, C1-6alkyl, or a mono- or di-substituted C1-6 alkyl; and a co-catalyst comprising an organometallic compound, or reaction products of the pro-catalyst and the co-catalyst. The film products have excellent clarity, superior dart impact, resistance to tear and favorable sealability characteristics.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:97794 HCAPLUS

DOCUMENT NUMBER: 132:237634

TITLE: Transition metal compatibilization of poly(vinylamine) and poly(ethylenimine)

AUTHOR(S): Belfiore, Laurence A.; Indra, Erik M.

CORPORATE SOURCE: Polymer Physics and Engineering Laboratory, Department of Chemical and Bioresource Engineering, Colorado State University, Fort Collins, CO, 80523, USA

SOURCE: Journal of Polymer Science, Part B: Polymer Physics (2000), 38(4), 552-561

CODEN: JPBPEM; ISSN: 0887-6266

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly(vinylamine), PVA, complexes with cobalt chloride hexahydrate exhibit a 45°C enhancement in the glass-transition temperature per mol. % of the d-block metal cation. Poly(ethylenimine), PEI, complexes with  $\text{CoCl}_2(\text{H}_2\text{O})_6$  exhibit a 20°C enhancement in  $T_g$  per mol. %  $\text{Co}^{2+}$ . Since the basicities of primary and secondary amines are comparable (i.e.,  $\text{pK}_b$ , PVA  $\approx 3.34$  vs.  $\text{pK}_b$ , PEI  $\approx 3.27$ ) and the rates at which each polymeric ligand displaces waters of hydration in the coordination sphere of  $\text{Co}^{2+}$  are similar, transition metal compatibilization is operative in blends of both polymers with  $\text{CoCl}_2(\text{H}_2\text{O})_6$ . These two polymers are immiscible in the absence of the inorg. component. IR spectroscopy suggests that nitrogen lone pairs in PVA and PEI coordinate to  $\text{Co}^{2+}$ . The stress-strain response of a 75/25 blend of PVA and PEI with 2 mol %  $\text{Co}^{2+}$  reveals a decrease in elastic modulus from  $4.4 \pm 109 \text{ N/m}^2$  to  $5.7 \pm 107 \text{ N/m}^2$ , a decrease in fracture stress from  $3.7 \pm 107 \text{ N/m}^2$  to  $2.0 \pm 106 \text{ N/m}^2$ , and an increase in ultimate strain from 1.3 to 12% relative to the 75/25 immiscible polymer-polymer blend. A plausible explanation for this effect is based on the fact that cobalt chloride hexahydrate compatibilizes both polymers by forming a coordination bridge between nitrogen lone pairs in dissimilar chains. Hence, poly(ethyleneimine), which is very weak with a  $T_g$  near  $-40^\circ\text{C}$ , is integrated into a homogeneous structure with poly(vinylamine) and the mech. properties of the individual polymers are averaged in the compatibilized ternary complex.

REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:65303 HCAPLUS

DOCUMENT NUMBER: 132:94518

TITLE: Multilayer film product comprising polyolefins

INVENTOR(S): Thakker, Mahendra T.; Jani, Dharmendra

PATENT ASSIGNEE(S): Huntsman Polymers Corp., USA

SOURCE: U.S., 18 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| US 6017615             | A    | 20000125 | US 1997-918064  | 19970825 |
| PRIORITY APPLN. INFO.: |      |          | US 1997-918064  | 19970825 |

AB A coextruded multilayer film product comprises: (a) a core layer having a first side and a second side; (b) a first outer layer disposed on the first side of the core layer; and (c) a second outer layer disposed on the second side of the core layer, wherein the core layer comprises a polyolefin polymer having a heat of fusion of 0.4-75 J/g, polydispersity  $<10$ , a melt flow rate 0.3-30 g per 10 min at  $230^\circ\text{C}$ , and a MEK-soluble fraction content between 1-12%. The film products have excellent clarity, superior dart impact, resistance to tear and favorable sealability characteristics.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:286033 HCAPLUS

DOCUMENT NUMBER: 130:325797

TITLE: Flexible polyolefins as blend diluent component



INVENTOR(S): Subach, Daniel J.; Thakker, Mahendra T.;  
Krishnamurthy, Vaidyanathan; Jani, Dharmendra  
; Whewell, Christopher J.  
PATENT ASSIGNEE(S): Huntsman Polymers Corporation, USA  
SOURCE: PCT Int. Appl., 59 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 9920694  | A1   | 19990429 | WO 1998-US21643 | 19981014 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,<br>DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,<br>KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,<br>MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,<br>TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM<br>RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,<br>FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,<br>CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |      |          |                 |          |
| AU 9911882  | A1   | 19990510 | AU 1999-11882   | 19981014 |
| PRIORITY APPLN. INFO.: US 1997-62320P P 19971017<br>US 1998-165449 A 19981002<br>WO 1998-US21643 W 19981014   |      |          |                 |          |

AB Flexible polyolefins (FPO) provide a cost savings to end uses by effectively diluting costly polymeric materials while preserving, and in some cases enhancing, the beneficial phys. properties of more costly and highly-engineered polymer compns.; the FPO being prepared in the presence of catalyst and crystallinity modifying amount of silane or other electron donor. FPO's have heat of fusion 0.4-75 J/g, polydispersity <10, melt flow rate (230°) 0.3-10 g/10 min, and MEK soluble fraction 1-12%.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:56941 HCAPLUS

DOCUMENT NUMBER: 130:119416

TITLE: Once daily injection of exendin-4 to diabetic mice achieves long-term beneficial effects on blood glucose concentrations

AUTHOR(S): Greig, N. H.; Holloway, H. W.; De Ore, K. A.;  
Jani, D.; Wang, Y.; Zhou, J.; Garant, M. J.;  
Egan, J. M.

CORPORATE SOURCE: Drug Design Development Section, National Inst. Aging,  
Baltimore, MD, 21224, USA

SOURCE: Diabetologia (1999), 42(1), 45-50

CODEN: DBTGAI; ISSN: 0012-186X

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Glucagon-like peptide-1 is the main hormonal mediator of the enteroinsular axis. Recently, it has addnl. received considerable attention as a possible new treatment for type II (non-insulin-dependent) diabetes mellitus. Its major disadvantage is that its duration of action is too short to achieve good 24-h metabolic control. Exendin-4, which is produced in the salivary glands of Gila monster lizards, is structurally similar to glucagon-like peptide-1 and shares several useful biol. properties with glucagon-like peptide-1. It binds the glucagon-like

peptide-1 receptor, stimulates insulin release and increases the cAMP production in  $\beta$ -cells. We report that exendin-4 is a more potent insulinotropic agent when given i.v. to rats than is glucagon-like peptide-1 (ED50 0.19 nmol/kg for glucagon-like peptide-1 vs. 0.0143 nmol/kg for exendin-4) and causes a greater elevation in cAMP concns. in isolated islets. Of even greater interest we found that when given i.p. only once daily to diabetic mice it had a prolonged effect of lowering blood glucose. After 1 wk of treatment blood glucoses were 5.0 mmol/L compared to diabetic concns. of 13.2 mmol/L. After 13 wk of daily treatment HbA1c was 8.8% in non-treated diabetic animals compared with 4.7% in treated diabetic animals. Blood glucoses also were lower and insulin concns. higher in the treated animals. Exendin-4 could therefore be preferable to glucagon-like peptide-1 as a long-term treatment of type II diabetes.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:675104 HCAPLUS

DOCUMENT NUMBER: 129:261390

TITLE: Polyolefin blends used for non-woven and adhesive applications

INVENTOR(S): Thakker, Mahendra T.; Galindo, Fabian; Jani, Dharmendra; Sustic, Andres

PATENT ASSIGNEE(S): Huntsman Polymers Corporation, USA

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| WO 9842780  | A1   | 19981001 | WO 1998-US5979  | 19980324   |
| W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, GW, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |            |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
| US 5723546  | A    | 19980303 | US 1997-822865  | 19970324   |
| US 6080818  | A    | 20000627 | US 1998-33172   | 19980302   |
| CA 2284725  | AA   | 19981001 | CA 1998-2284725 | 19980324   |
| AU 9865871  | A1   | 19981020 | AU 1998-65871   | 19980324   |
| AU 724297   | B2   | 20000914 |                 |            |
| EP 970147   | A1   | 20000112 | EP 1998-912068  | 19980324   |
| R: DE, DK, FR, GB, IT, SE   |      |          |                 |            |
| BR 9808984  | A    | 20000801 | BR 1998-8984    | 19980324   |
| JP 2002514274   | T2   | 20020514 | JP 1998-545996  | 19980324   |
| MX 9908670  | A    | 20000531 | MX 1999-8670    | 19990922   |
| PRIORITY APPLN. INFO.:  |      |          | US 1997-822865  | A 19970324 |
|   |      |          | US 1998-75297P  | P 19980220 |
|   |      |          | US 1998-33172   | A 19980302 |
|   |      |          | WO 1998-US5979  | W 19980324 |

AB The invention relates to methods for preparing a fiber, thread or yarn including a polymer blend of a predominantly atactic flexible polyolefin polymer having a high weight average mol. weight of at least about 100,000 and

a

heat of fusion of about 15 to 60 J/g with an isotactic polypropylene polymer, and forming the polymer blend into a fiber, thread or yarn, wherein the flexible polymer is present in an amount sufficient to increase the elasticity of the fiber, thread or yarn to inhibit substantial breakage thereof, for use in non-woven products. The invention also relates to the fiber, thread or yarn including the polymers, as well as non-woven products prepared therefrom. Moreover, the invention relates to composite articles including the fiber, thread or yarn in combination with adhesive compns., and polymer blends used for such adhesive compns.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:288916 HCAPLUS

DOCUMENT NUMBER: 129:28684

TITLE: Transition-metal compatibilization of polymer blends

AUTHOR(S): Indra, Erik M.; McCurdie, Mary Pat; Sun, Xinzhi; Belfiore, Laurence A.

CORPORATE SOURCE: Polymer Physics and Engineering Laboratory Department of Chemical and Bioresource Engineering, Colorado State University, Fort Collins, CO, 80523, USA

SOURCE: Interfacial Aspects of Multicomponent Polymer Materials, [Symposium], Orlando, Fla., Aug., 1996 (1997), Meeting Date 1996, 241-264. Editor(s): Lohse, David J.; Russell, Thomas P.; Sperling, L. H. Plenum: New York, N. Y.

CODEN: 66AEAS

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The desirable properties of polymer-polymer blends have led to considerable research on transition-metal compatibilization of nitrogen-based and diene polymer blends. Polymers of interest are poly(vinylamine), poly(4-vinylpyridine), polyethylenimine, poly(L-histidine), 1,2-polybutadiene, and cis-polybutadiene. Binary polymer/transition-metal complexes exhibit synergistic thermal properties. The poly(vinylamine)/cobalt complex with 3 mol% cobalt showed a Tg enhancement of  $\approx 140^\circ$  in comparison to the undild. polymer. Binary mixts. of the polymers of interest are incompatible. It was attempted to compatibilize these blends with a transition-metal salt. Cobalt chloride hexahydrate successfully compatibilizes blends of poly(vinylamine) and polyethylenimine.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:10142 HCAPLUS

DOCUMENT NUMBER: 128:61882

TITLE: Palladium(II) complexes with polyphosphazene

AUTHOR(S): Da, Pronab; Indra, Erik M.; Belfiore, Laurence A.

CORPORATE SOURCE: Polymer Physics and Engineering Laboratory, Department of Chemical and Bioresource Engineering, Colorado State University, Fort Collins, CO, 80523, USA

SOURCE: Polymer Engineering and Science (1997), 37(12), 1909-1916

CODEN: PYESAZ; ISSN: 0032-3888

PUBLISHER: Society of Plastics Engineers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Allylphenoxy-substituted polyphosphazene was reacted with

bis(acetonitrile)dichloropalladium(II) and the resulting complexes were characterized using acid-base solution chemical, sol-gel phase transitions, thermomech. property measurements and IR spectroscopy. The solid complexes are not soluble in THF, the solvent used in their preparation. The Pd cannot be displaced by a stronger base, e.g., PPh<sub>3</sub>. There is a monotonic increase in T<sub>g</sub> temperature at higher Pd content. The increase in high-strain mech. properties cannot be explained solely by a filler effect.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:270327 HCAPLUS

DOCUMENT NUMBER: 127:5558

TITLE: Multi-functional coordination crosslinks in poly(vinylamine) complexes with cobalt chloride

AUTHOR(S): Belfiore, Laurence A.; Indra, Erik; Das, Pronab

CORPORATE SOURCE: Department Chemical Biosource Engineering, Colorado State University, Fort Collins, CO, 80523, USA

SOURCE: Macromolecular Symposia (1997), 114(Polymer-Solvent Complexes), 35-50

CODEN: MSYMEC; ISSN: 1022-1360

PUBLISHER: Huethig & Wepf

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly(vinylamine) complexes with cobalt chloride hexahydrate exhibit the largest glass transition temperature enhancements that were measured in this laboratory. The T<sub>g</sub> increases from 56° in the undiluted polymer to 193° when the molar concentration of Co is only 3%, based on the mols of polymeric repeat units. This translates to a 45° enhancement in T<sub>g</sub> per mol% Co. Higher glass transition temps. were measured for other polymeric complexes with d-block salts, but this study reports the largest ΔT<sub>g</sub> = T<sub>g</sub>(complex) - T<sub>g</sub>(undiluted polymer) when transition-metal catalyzed chemical crosslinking reactions do not occur. A plausible explanation for this effect is based on the fact that CoCl<sub>2</sub> hexahydrate maintains pseudo-octahedral symmetry in the undiluted crystalline state and in an amorphous glassy complex with the polymer. The lone pair on N in the amino side-group is a strong base and, most likely, displaces all 4 waters of hydration that coordinate directly to the metal center. In fact, ests. of the ligand field splitting and the ligand field stabilization energy for octahedral Co complexes that contain Me amine (CH<sub>3</sub>NH<sub>2</sub>) model ligands suggest that 5 or 6 amino side-groups from several different chains might coordinate to each metal center, drastically reducing the mobility of the polymer. Both chloride anions remain near each divalent Co<sup>2+</sup> center, but either 1 or 2 Cl<sup>-</sup> might not reside in the first-shell coordination sphere of the transition metal. This bonding picture suggests that octahedral Co acts as a multi-functional bridge between 5 or 6 amino side-groups. Empirical ligand field stabilization calcns. support the concept that octahedral Co<sup>2+</sup> is a multifunctional coordination crosslinking agent, and the inorg. literature provides exptl. verification that similar small-mol. complexes (i.e., [Co(NH<sub>3</sub>)<sub>6</sub>]<sup>2+</sup>) exist. It is proposed that the onset of T<sub>g</sub> occurs when sufficient thermal energy is supplied to remove either x or (x-1) amino side-group ligands from the coordination sphere of Co, where x is either 5 or 6. This is an endothermic process based on bond energies, as well as calcns. which focus on the relative energies of the metal d-electrons.

L46 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:252302 HCAPLUS

DOCUMENT NUMBER: 126:251552

TITLE: Multi-functional coordination crosslinks in poly(vinylamine) complexes with cobalt chloride

AUTHOR(S): Belfiore, Laurence A.; Indra, Erik; Das, Pronab

CORPORATE SOURCE: Polymer Physics & Engineering Laboratory, Department of Chemical & Bioresource Engineering, Colorado State University, Fort Collins, CO, 80523, USA

SOURCE: Polymeric Materials Science and Engineering (1997), 76, 97-98

CODEN: PMSEDG; ISSN: 0743-0515

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly(vinylamine) complexes with cobalt chloride hexahydrate exhibit a 450° enhancement in glass temperature per mol% cobalt relative to the undiluted polymer. Multiple amino ligands in the coordination sphere of pseudooctahedral cobalt was proposed to rationalize this increase in the glass temperature. Ests. of the pseudo-octahedral ligand field splitting and the ligand field stabilization energy for high-spin d7 Co(II) complexes provided support for the proposed amorphous structures.

L46 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:163616 HCAPLUS

TITLE: Multi-functional coordination crosslinks in poly(vinylamine) complexes with cobalt chloride.

AUTHOR(S): Belfiore, Laurence A.; Indra, Erik; Das, Pronab

CORPORATE SOURCE: Department Chemical & Bioresource Engineering, Colorado State University, Fort Collins, CO, 80523, USA

SOURCE: Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), PMSE-056. American Chemical Society: Washington, D. C.

CODEN: 64AOAA

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Poly(vinylamine) complexes with cobalt chloride hexahydrate exhibit a 45°C enhancement in the glass transition temperature per mol% cobalt relative to the undiluted polymer. Multiple amino ligands in the coordination sphere of pseudo-octahedral cobalt(II) have been proposed to rationalize this increase in Tg. Ests. of the pseudo-octahedral ligand field splitting and the ligand field stabilization energy for high-spin d7 Co(II) complexes provide support for the proposed amorphous structures. The concept of multi-functional coordination crosslinking in polymeric materials via transition metal chemical is quite novel, but consistent with several small-mol. examples in the inorg. literature. Thermal energy is required to remove a sufficient number of amino ligands from the coordination sphere of cobalt and induce the glass transition. This endothermic process is correlated with the energetic stabilization of cobalt's d7 electronic configuration in the presence of multiple amino sidegroup ligands.

=> => D STAT QUE L49

L36 197 SEA FILE=HCAPLUS ABB=ON PLU=ON TAMPONADE

L37 128496 SEA FILE=HCAPLUS ABB=ON PLU=ON OPTHALMI? OR EYE

L38 72 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L37

L39 55042 SEA FILE=HCAPLUS ABB=ON PLU=ON SURGERY/CV OR ?SURGER?

L40 37 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L39

L41 13 SEA FILE=HCAPLUS ABB=ON PLU=ON (L36(L) L39) NOT L40  
 L42 85 SEA FILE=HCAPLUS ABB=ON PLU=ON "KUNZLER J"/AU OR "KUNZLER J F"/AU OR ("KUNZLER JAY"/AU OR "KUNZLER JAY F"/AU OR "KUNZLER JAY FRIEDRICH"/AU)  
 L43 219 SEA FILE=HCAPLUS ABB=ON PLU=ON "SALAMONE J C"/AU OR ("SALAMONE E JOSEPH C"/AU OR "SALAMONE JOSEPH CHARLES"/AU)  
 L44 23 SEA FILE=HCAPLUS ABB=ON PLU=ON "JANI D"/AU OR ("JANI DHARMENDRA"/AU OR "JANI DHARMENDRA M"/AU)  
 L45 10 SEA FILE=HCAPLUS ABB=ON PLU=ON ("INDRA ERIK"/AU OR "INDRA ERIK M"/AU)  
 L46 32 SEA FILE=HCAPLUS ABB=ON PLU=ON (L41 OR L44 OR L45) NOT (L40 OR L41)  
 L47 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L42 AND L43  
 L48 2 SEA FILE=HCAPLUS ABB=ON PLU=ON (L42 OR L43) AND L36  
 L49 27 SEA FILE=HCAPLUS ABB=ON PLU=ON (L47 OR L48) NOT (L40 OR L41 OR L46)

=> D IBIB ABS L49 1-27

L49 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:899738 HCAPLUS

TITLE: Long-term release of fluocinolone acetonide using biodegradable fumarate-based polymers

AUTHOR(S): Haesslein, A.; Ueda, H.; Hacker, M. C.; Jo, S.; Ammon, D. M.; Borazjani, R. N.; Kunzler, J. F.; Salamone, J. C.; Mikos, A. G.

CORPORATE SOURCE: Department of Bioengineering, Rice University, Houston, TX, 77251-1892, USA

SOURCE: Journal of Controlled Release (2006), 114(2), 251-260  
 CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Intraocular drug delivery systems made from biodegradable polymers hold great potential to effectively treat chronic diseases of the posterior segment of the eye. This study is based on the hypothesis that crosslinked poly(propylene fumarate) (PPF)-based matrixes are suitable long-term delivery devices for the sustained release of the anti-inflammatory drug fluocinolone acetonide (FA) due to their hydrophobicity and network d. FA-loaded rods of 10 mm length and 0.6 mm diameter were fabricated by photo-crosslinking PPF with N-vinyl pyrrolidone (NVP). The released amts. of FA and NVP were determined by HPLC anal. The effects of drug loading and the ratio of PPF to NVP on the release kinetics were investigated using a 23-1 factorial design. Overall, FA release was sustained in vitro over almost 400 days by all tested formulations. Low burst release was followed by a dual modality release controlled by diffusion and bulk erosion with release rates up to 1.7 µg/day. The extent of the burst effect and the release kinetics were controlled by the drug loading and the matrix composition. Matrix water content and degradation were determined gravimetrically. Micro-computed tomog. was used to image structural and dimensional changes of the devices. The results show that photo-crosslinked PPF-based matrixes are promising long-term delivery devices for intraocular drug delivery.

L49 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:864854 HCAPLUS

TITLE: Novel biomaterials in ophthalmology and wound care

AUTHOR(S): Salamone, Joseph C.; Kunzler, Jay F.

CORPORATE SOURCE: ; Ammon, Daniel; Salamone, Ann Beal; Borazjani, Roya  
 SOURCE: Bausch & Lomb, Inc, Rochester, NY, 14609, USA  
 Abstracts of Papers, 232nd ACS National Meeting, San  
 Francisco, CA, United States, Sept. 10-14, 2006 (2006)  
 , POLY-284. American Chemical Society: Washington, D.  
 C.

CODEN: 69IHRD

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

AB The research on polymers for biomedical applications has expanded dramatically in the last ten years. This is due primarily to the fact that polymers have performed well for biomedical use, for both synthetic and natural materials. The reason for this is very complicated, but most researchers agree that many polymers work well in the body because they are inert, are generally non-toxic, and may, in fact, mimic the natural structure of the body's cellular makeup. Recent advances in the use of polymers for biomedical applications include such areas as tissue engineering, drug delivery, intraocular lenses, contact lenses and wound care dressings. The advances in these areas have been rather dramatic. Polymers have now been used for the design of artificial corneas, targeted ocular drug delivery devices, small incision intraocular lenses, and the first true extended wear contact lenses. This presentation will focus on the preparation, properties, classes and applications of polymers used in ophthalmol. and wound care.

L49 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:729628 HCAPLUS

DOCUMENT NUMBER: 143:212534

TITLE: Vinyl chloroformate-free synthesis of vinyl and  
 allyl(thio)carbamate capped polysiloxanes for contact  
 lenses

INVENTOR(S): Seelye, David E.; Kunzler, Jay F.;  
 Salamone, Joseph C.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|---------------|--|----------|-----------------|----------|
| WO 2005073181 | A1   | 20050811 | WO 2005-US2930  | 20050127 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
| RW:           | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |

US 2005176980 A1 20050811 US 2005-45017 20050127

PRIORITY APPLN. INFO.: US 2004-540134P P 20040128

AB Method for making a compound (CH<sub>2</sub>:CH(CH<sub>2</sub>)bYC(O)N)xR<sub>1</sub>(A), where x=0-1, b = 0-1, Y is O or S and R<sub>1</sub> is a mono- or difunctional organic siloxy-containing radical, comprises reacting a compound CH<sub>2</sub>:CH(CH<sub>2</sub>)bOSi(Me)<sub>3</sub>(B), where b =

0-1, with a compound  $(Y:C:N-(CH_2)_m)x-R_1(C)$ , where  $x = 0-1$ ,  $Y$  is O or S,  $m = 0-20$  and  $R_1$  is a mono- or difunctional organic siloxy-containing radical.

#### Method

involves metal, metal salt or organometallic catalyst and organic solvent. Prepared vinyl(thio)carbamate or allyl(thio)carbamate capped polysiloxanes are obtained via vinyl chloroformate-free method which excludes undesirable phosgene and organomercury intermediates. (N-vinyloxycarbonyl)-3-aminopropyltris(trimethylsiloxysilane) and vinylcarbamate-capped polydimethylsiloxane are two key monomers used in the production of hydrogel contact lenses and they could be easily prepared by the described method.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:642039 HCAPLUS  
 TITLE: Drug delivery device with mechanical locking mechanism  
 INVENTOR(S): Watson, David; Purtell, George; Levy, Brian;  
 Ruscio, Dominic V.; Kunzler, Jay F.;  
 Schmidt, Michael M.; Jonasse, Matthew S.;  
 Salamone, Joseph C.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE       |
|------------------------|------|----------|-----------------|------------|
| US 2005158365          | A1   | 20050721 | US 2004-13230   | 20041215   |
| PRIORITY APPLN. INFO.: |      |          | US 2003-531879P | P 20031222 |

AB A drug delivery device for placement in the eye includes a drug core comprising a pharmaceutically active agent, and a holder that holds the drug core. The holder is made of a material impermeable to passage of the active agent and includes at least one opening for passage of the pharmaceutically agent therethrough to eye tissue. The holder is mechanically secured to a suture tab.

L49 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:633413 HCAPLUS  
 TITLE: Drug delivery device with mechanical locking mechanism  
 INVENTOR(S): Watson, David; Purtell, George; Levy, Brian;  
 Ruscio, Dominic V.; Kunzler, Jay F.;  
 Schmidt, Michael M.; Jonasse, Matthew S.;  
 Salamone, Joseph C.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2005065602 | A2   | 20050721 | WO 2004-US42089 | 20041216 |
| WO 2005065602 | A3   | 20051027 |                 |          |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,



CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

CA 2550697 AA 20050721 CA 2004-2550697 20041216  
 EP 1699393 A2 20060913 EP 2004-814293 20041216

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

PRIORITY APPLN. INFO.: US 2003-531879P P 20031222  
 WO 2004-US42089 W 20041216

AB A drug delivery device for placement in the eye includes a drug core comprising a pharmaceutically active agent, and a holder that holds the drug core. The holder is made of a material impermeable to passage of the active agent and includes at least one opening for passage of the pharmaceutically agent therethrough to eye tissue. The holder is mechanically secured to a suture tab.

L49 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1025383 HCAPLUS

TITLE: Polymers in Ophthalmic Applications

AUTHOR(S): Linhardt, Jeffrey G.; Kunzler, Jay F.;  
 Salamone, Joseph C.

CORPORATE SOURCE: Research Group, Bausch & Lomb, Rochester, NY, 14609,  
 USA

SOURCE: Abstracts, 32nd Northeast Regional Meeting of the  
 American Chemical Society, Rochester, NY, United  
 States, October 31-November 3 (2004), GEN-235.  
 American Chemical Society: Washington, D. C.  
 CODEN: 69FWEU

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Polymeric materials have found a number of wide ranging applications for the eye. These technologies encompass contact lens and lens care products, intraocular lenses for cataract surgery, and more recently devices for controlled release of pharmaceuticals in the eye. This lecture will cover the evolution of soft contact lens materials over the last several decades including both daily wear, conventional hydrogel lenses and more recently silicone hydrogel lenses for extended wear. In addition, cataract surgery will be discussed along with the materials criterion necessary for the development of intraocular lenses (IOL's).

L49 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:655817 HCAPLUS

TITLE: New advances in ophthalmic materials

AUTHOR(S): Kunzler, Jay F.; Salamone, Joseph C.

CORPORATE SOURCE: Research, Bausch and Lomb, Rochester, NY, 14603-0450,  
 USA

SOURCE: Abstracts of Papers, 228th ACS National Meeting,  
 Philadelphia, PA, United States, August 22-26, 2004  
 (2004), BMGT-008. American Chemical Society:  
 Washington, D. C.  
 CODEN: 69FTZ8

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB The research on polymers for ophthalmic applications has expanded dramatically in the last ten years. This is due primarily to the fact that polymers have performed well for biomedical use, for both synthetic and natural materials. The reason for this is very complicated, but most researchers agree that many polymers work well in the body because they are inert, are generally non-toxic, and may, in fact, mimic the natural structure of the body's cellular makeup. Recent advances in the use of polymers for ophthalmic applications include such areas as tissue engineering, drug delivery, intraocular lenses and contact lenses. The advances in these areas have been rather dramatic. Polymers have now been used for the design of artificial corneas, targeted ocular drug delivery devices, small incision intraocular lenses, and the first true extended wear contact lenses. This presentation will focus on the preparation, properties, classes and applications of polymers used in ophthalmol.

L49 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:566569 HCAPLUS  
DOCUMENT NUMBER: 141:128935  
TITLE: Surface treatment of ophthalmic lenses utilizing microwave radiation  
INVENTOR(S): Kunzler, Jay F.; McGee, Joseph A.; Salamone, Joseph C.; Seelye, David E.  
PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
SOURCE: PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 2004058318   | A1   | 20040715 | WO 2003-US40294 | 20031218 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
| AU 2003297323   | A1   | 20040722 | AU 2003-297323  | 20031218 |
| US 2004166232   | A1   | 20040826 | US 2003-740003  | 20031218 |
| PRIORITY APPLN. INFO.: US 2002-436229P P 20021223   |      |          |                 |          |
| WO 2003-US40294 W 20031218  |      |          |                 |          |

AB This invention provides a method of modifying the surface of a medical device, such as an ophthalmic lens. The method involves contacting a surface of the medical device with a solution containing a surface modifying agent; and subjecting the device surface and surface modifying agent to microwave radiation while the surface modifying agent is in contact with the device surface. The device may be constructed of materials such as hydrogel copolymers and silicone materials. Among examples provided are surface modifications of Soflens 66 and PureVision contact lenses with and acrylamide-acrylic acid copolymer.

L49 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:490425 HCAPLUS  
DOCUMENT NUMBER: 141:39499

TITLE: Surface treatment of polymeric medical device for improving its wettability  
 INVENTOR(S): Kunzler, Jay F.; McGee, Joseph A.; Salamone, Joseph C.; Seelye, David E.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|---|------|----------|------------------|------------|
| US 2004116310   | A1   | 20040617 | US 2002-321949   | 20021217   |
| US 6958169  | B2   | 20051025 |                  |            |
| CA 2507614  | AA   | 20040722 | CA 2003-2507614  | 20031208   |
| WO 2004060431   | A1   | 20040722 | WO 2003-US38873  | 20031208   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |            |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |            |
| AU 2003298043   | A1   | 20040729 | AU 2003-298043   | 20031208   |
| EP 1572261  | A1   | 20050914 | EP 2003-796765   | 20031208   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                  |            |
| CN 1726055  | A    | 20060125 | CN 2003-80106573 | 20031208   |
| JP 2006513282   | T2   | 20060420 | JP 2004-565244   | 20031208   |
| PRIORITY APPLN. INFO.:  |      |          |                  |            |
|   |      |          | US 2002-321949   | A 20021217 |
|   |      |          | WO 2003-US38873  | W 20031208 |

AB A method for improving the wettability of a medical device comprises (a) providing a medical device formed from a monomer mixture comprising a hydrophilic monomer containing a copolymerizable group and an electron donating moiety, and a second monomer containing a copolymerizable group and a reactive functional group and (b) contacting the surface of the medical device with a wetting agent containing a proton donating moiety reactive with the functional group provided by the second monomer and capable of forming complexes with the electron donating moiety provided by the hydrophilic monomer. Thus, a monomer mixture containing two siloxane linkage-containing monomers, tris(trimethylsiloxy)silylpropyl methacrylate, N,N-dimethylacrylamide, N-vinyl-2-pyrrolidone, hexanol, and initiator was cast into contact lenses, which were treated with 1% solution of acrylamide-acrylic acid copolymer as a wetting agent. The resultant treated lenses were highly wettable and lubricious.

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:220047 HCAPLUS

DOCUMENT NUMBER: 140:259161

TITLE: Macromonomer, elastomeric, expandable hydrogel compositions, preparation and use in ophthalmic devices

INVENTOR(S): Kunzler, Jay F.; Salamone, Joseph C.

PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| US 2004054026   | A1   | 20040318 | US 2002-246242  | 20020918 |
| CA 2499504  | AA   | 20040401 | CA 2003-2499504 | 20030910 |
| WO 2004026928   | A1   | 20040401 | WO 2003-US28442 | 20030910 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                 |          |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  |      |          |                 |          |
| AU 2003266026   | A1   | 20040408 | AU 2003-266026  | 20030910 |
| EP 1546225  | A1   | 20050629 | EP 2003-797898  | 20030910 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |          |
| CN 1681862  | A    | 20051012 | CN 2003-822185  | 20030910 |
| JP 2005539128   | T2   | 20051222 | JP 2004-537764  | 20030910 |
| PRIORITY APPLN. INFO.: US 2002-246242 A 20020918<br>WO 2003-US28442 W 20030910  |      |          |                 |          |

AB Optically transparent, soft, flexible, elastomeric, expandable hydrogel compns. are used in ophthalmic devices such as intraocular lenses, contact lenses and corneal inlays. The preferred hydrogel compns. are produced through the copolymn. of  $\geq 1$  fluoro side-chain methacrylate end-capped silicone macromonomers with  $\geq 1$  hydrophilic monomers. The integral monomer for copolymers for manufacture of lens materials was exemplified by methacrylate end-capped poly(25 mol%) 3-(2,2,3,3,4,4,5,5-octafluoropentoxy)propylmethoxysiloxane-co-(75 mol%) (dimethylsiloxane).

L49 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:191118 HCAPLUS  
 DOCUMENT NUMBER: 140:241091  
 TITLE: Vitreoretinal tamponades based on fluorosilicone fluids  
 INVENTOR(S): Kunzler, Jay F.; Ozark, Richard M.; Salamone, Joseph C.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: U.S., 4 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| US 6703378   | B1   | 20040309 | US 2002-247452  | 20020919 |
| CA 2499859   | AA   | 20040401 | CA 2003-2499859 | 20030911 |
| WO 2004026320  | A1   | 20040401 | WO 2003-US28300 | 20030911 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, |      |          |                 |          |

CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,  
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,  
 RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,  
 ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

AU 2003270470 A1 20040408 AU 2003-270470 20030911

EP 1539196 A1 20050615 EP 2003-752163 20030911

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1684695 A 20051019 CN 2003-822062 20030911

JP 2006503613 T2 20060202 JP 2004-537753 20030911

PRIORITY APPLN. INFO.: US 2002-247452 A 20020919

WO 2003-US28300 W 20030911

AB Fluorosilicone fluids useful as high-d. fluid ocular tamponades  
 and methods of producing, purifying and using the fluorosilicone fluids in  
 an ocular surgical procedure for retinal treatment are disclosed.  
 Octamethyl cyclotetrasiloxane was copolymerized with tetra-Me  
 cyclotetrasiloxane and treated with hexamethyl disiloxane in the presence  
 of trifluoromethane sulfonic acid. The trimethylsilyl-capped polysiloxane  
 was allowed to react with allyloxyoctafluoropentane and the product was a  
 viscous, clear fluid. These fluorosilicone fluid tamponades are  
 used in the field of ophthalmology.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:20388 HCAPLUS

DOCUMENT NUMBER: 140:99681

TITLE: Surface modification of functional group-containing  
 intraocular lenses

INVENTOR(S): Valint, Paul L.; McGee, Joseph A.; Yan, Wenyan;  
 Salamone, Joseph C.; Ammon, Daniel M.;  
 Kunzler, Jay F.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 37 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| US 2004006386  | A1   | 20040108 | US 2002-187056  | 20020628 |
| US 7083646   | B2   | 20060801 |                 |          |
| CA 2491055   | AA   | 20040108 | CA 2003-2491055 | 20030617 |
| WO 2004002546  | A1   | 20040108 | WO 2003-US19130 | 20030617 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,<br>HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,<br>LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,<br>RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,<br>ZA, ZW |      |          |                 |          |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,<br>IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  |      |          |                 |          |
| AU 2003280036  | A1   | 20040119 | AU 2003-280036  | 20030617 |
| EP 1519761   | A1   | 20050406 | EP 2003-742034  | 20030617 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 CN 1665553 A 20050907 CN 2003-815388 20030617  
 JP 2005531365 T2 20051020 JP 2004-517665 20030617  
 PRIORITY APPLN. INFO.: US 2002-187056 A 20020628  
 WO 2003-US19130 W 20030617

AB Disclosed are surface-modified medical devices such as intraocular lens implants formed from one or more functional group-containing materials using reactive, hydrophilic polymers for the purpose of reducing or eliminating lens epithelial cell growth thereon, reducing or eliminating silicone oil absorption upon subsequent surgical exposure and/or reducing or eliminating implantation inserter friction. Addnl., a method of making and using surface-modified intraocular lens implants is provided. For example, intraocular lenses made of 2-hydroxyethyl methacrylate-6-hydroxyhexyl methacrylate were surface modified by placing the lenses in a solution of N,N-dimethylacrylamide-glycidyl methacrylate copolymer and autoclaving them at 121°. The lenses were rinsed in a buffered saline solution

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:2674 HCAPLUS  
 DOCUMENT NUMBER: 140:65198  
 TITLE: Fluorosiloxane matrix controlled diffusion drug delivery system  
 INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.  
 ; Ammon, Daniel M., Jr.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 2004000288   | A1   | 20031231 | WO 2003-US19026 | 20030616 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                 |          |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  |      |          |                 |          |
| US 2004043067   | A1   | 20040304 | US 2002-175716  | 20020619 |
| CA 2489987  | AA   | 20031231 | CA 2003-2489987 | 20030616 |
| AU 2003238247   | A1   | 20040106 | AU 2003-238247  | 20030616 |
| EP 1515705  | A1   | 20050323 | EP 2003-737141  | 20030616 |
| EP 1515705  | B1   | 20060621 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |          |
| BR 2003011963   | A    | 20050329 | BR 2003-11963   | 20030616 |
| CN 1662227  | A    | 20050831 | CN 2003-814466  | 20030616 |
| JP 2005530842   | T2   | 20051013 | JP 2004-515837  | 20030616 |
| PRIORITY APPLN. INFO.: US 2002-175716 A 20020619  |      |          |                 |          |
| WO 2003-US19026 W 20030616  |      |          |                 |          |
| AB Fluorinated side-chain siloxane copolymeric matrix controlled diffusion  |      |          |                 |          |

drug delivery systems are provided that allow controlled release of sustained concns. of therapeutic agents within a treated area for a prolonged period of time. The favorable solubility characteristics of the fluorinated sidechains of the siloxane copolymeric matrix controlled diffusion drug delivery systems allow for manipulation of drug release rates depending on the particular therapeutic use and the particular needs of the patient. A methacrylate end-capped [3-(2,2,3,3,4,4,5,5-octafluoropentoxy)propyl]methylsiloxane-dimethylsiloxane polymer was prepared and films were used to prepare a diffusion controlled release drug delivery system containing dimethylacrylamide, Darocur, and fluocinolone acetonide was prepared

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:1007903 HCAPLUS

DOCUMENT NUMBER: 140:43161

TITLE: Low water content, high refractive index, flexible, polymeric compositions

INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.  
; Ozark, Richard M.; Seelye, David E.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| US 2003236375   | A1   | 20031225 | US 2002-175715  | 20020619   |
| US 6852793  | B2   | 20050208 |                 |            |
| CA 2490008  | AA   | 20031231 | CA 2003-2490008 | 20030611   |
| WO 2004000901   | A1   | 20031231 | WO 2003-US18429 | 20030611   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                 |            |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  |      |          |                 |            |
| AU 2003243507   | A1   | 20040106 | AU 2003-243507  | 20030611   |
| EP 1519968  | A1   | 20050406 | EP 2003-761053  | 20030611   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |            |
| CN 1662568  | A    | 20050831 | CN 2003-814469  | 20030611   |
| JP 2005530026   | T2   | 20051006 | JP 2004-515774  | 20030611   |
| PRIORITY APPLN. INFO.:  |      |          |                 |            |
|   |      |          | US 2002-175715  | A 20020619 |
|   |      |          | WO 2003-US18429 | W 20030611 |

AB Optically transparent, relatively high refractive index polymeric compns. and ophthalmic devices such as intraocular lenses and corneal inlays made therefrom are described herein. The preferred polymeric compns. are produced through the polymerization of one or more copolymers with one or more hydrophilic monomers and optionally one or more aromatic-based monomers, hydrophobic monomers or a combination thereof. Thus, a film was cast using 65 parts phenylpropyl acrylate, 25 parts dimethylacrylamide, 10 parts methacryloyloxypropyl diphenylmethylsilane, 3 parts ethylene glycol dimethacrylate, and 0.5% Irgacure 819 photoinitiator. The film was cured

by two-hour UV irradiation and then extracted in isopropanol for 24 h, air dried and then hydrated in a borate buffered saline. The resultant films possessed a modulus of 143 g/mm<sup>2</sup>, a tear strength of 57 g/mm and a water content of 5.7%.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:376876 HCAPLUS

DOCUMENT NUMBER: 138:369375

TITLE: High refractive index polyoxyalkylene siloxysilane monomer and polymer compositions

INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.; Ozark, Richard M.; Seelye, David E.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| WO 2003040158   | A1   | 20030515 | WO 2002-US33575 | 20021017   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                 |            |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR  |      |          |                 |            |
| US 2003100697   | A1   | 20030529 | US 2001-136     | 20011102   |
| US 6908978  | B2   | 20050621 |                 |            |
| CA 2465498  | AA   | 20030515 | CA 2002-2465498 | 20021017   |
| EP 1465903  | A1   | 20041013 | EP 2002-782191  | 20021017   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK   |      |          |                 |            |
| JP 2005508411   | T2   | 20050331 | JP 2003-542203  | 20021017   |
| US 2005131191   | A1   | 20050616 | US 2005-41038   | 20050121   |
| US 7101949  | B2   | 20060905 |                 |            |
| US 2005127557   | A1   | 20050616 | US 2005-41172   | 20050121   |
| US 2005131189   | A1   | 20050616 | US 2005-41175   | 20050121   |
| US 7091299  | B2   | 20060815 |                 |            |
| PRIORITY APPLN. INFO.:  |      |          | US 2001-136     | A 20011102 |
|   |      |          | WO 2002-US33575 | W 20021017 |

OTHER SOURCE(S): MARPAT 138:369375

AB Optically transparent, relatively high refractive index polymeric compns. are used for ophthalmic devices such as intraocular lenses, contact lenses, and corneal inlays. The polymeric compns. are produced through the polymerization of  $\geq 1$  siloxysilane monomers or the copolymn. of  $\geq 1$  siloxysilane monomers with  $\geq 1$  aromatic or nonarom. nonsiloxymonomers, hydrophobic monomers, or hydrophilic monomers.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:376875 HCAPLUS



DOCUMENT NUMBER: 138:369374  
 TITLE: High refractive index siloxysilanes and polymer compositions  
 INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.; Ozark, Richard M.; Seelye, David E.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 2003040157   | A1   | 20030515 | WO 2002-US33136 | 20021016 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW   |      |          |                 |          |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR  |      |          |                 |          |
| US 2003109661   | A1   | 20030612 | US 2001-3635    | 20011102 |
| CA 2465494  | AA   | 20030515 | CA 2002-2465494 | 20021016 |
| EP 1448572  | A1   | 20040825 | EP 2002-773784  | 20021016 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK   |      |          |                 |          |
| CN 1582292  | A    | 20050216 | CN 2002-821928  | 20021016 |
| JP 2005508389   | T2   | 20050331 | JP 2003-542202  | 20021016 |
| PRIORITY APPLN. INFO.: US 2001-3635 A 20011102  |      |          |                 |          |
| WO 2002-US33136 W 20021016  |      |          |                 |          |
| AB Optically transparent, relatively high refractive index polymeric compns. are used for ophthalmic devices such as intraocular lenses, contact lenses, and corneal inlays. The polymeric compns. are produced through the polymerization of $\geq 1$ siloxysilane monomers or the copolymn. of $\geq 1$ siloxysilane monomers with $\geq 1$ aromatic or nonarom. nonsiloxy monomers, hydrophobic monomers, or hydrophilic monomers. |      |          |                 |          |
| REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT   |      |          |                 |          |

L49 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:376873 HCAPLUS  
 DOCUMENT NUMBER: 138:369373  
 TITLE: High refractive index aromatic-based siloxane monofunctional macromonomers for polymer compositions  
 INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.; Ozark, Richard M.; Seelye, David E.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2003040155 | A1   | 20030515 | WO 2002-US33438 | 20021017 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR

US 2003139557 A1 20030724 US 2001-137 20011102

US 6730767 B2 20040504

CA 2465483 AA 20030515 CA 2002-2465483 20021017

EP 1448571 A1 20040825 EP 2002-773807 20021017

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

CN 1582291 A 20050216 CN 2002-821869 20021017

JP 2005508388 T2 20050331 JP 2003-542200 20021017

US 2004082751 A1 20040429 US 2003-692378 20031023

US 6906162 B2 20050614

US 2004082752 A1 20040429 US 2003-692391 20031023

US 6989430 B2 20060124

US 2004087678 A1 20040506 US 2003-692387 20031023

US 7005494 B2 20060228

US 2004087753 A1 20040506 US 2003-692426 20031023

US 6992162 B2 20060131

PRIORITY APPLN. INFO.:

US 2001-137 A 20011102

WO 2002-US33438 W 20021017

AB Optically transparent, relatively high refractive index polymeric compns. are used for ophthalmic devices such as intraocular lenses, corneal inlays and contact lenses. The polymeric compns. are produced through the polymerization of  $\geq 1$  aromatic-based siloxane macromonomers or the copolymn. of  $\geq 1$  aromatic-based siloxane macromonomers with  $\geq 1$  nonsiloxy aromatic-based monomers, nonarom.-based hydrophobic monomers or nonarom.-based hydrophilic monomers. An example macromonomer was prepared by hydrosilation reaction of 1,3-bis(4-methacryloyloxybutyl)tetramethyldisiloxane with copolymer of octamethylcyclotetrasiloxane and tetramethylcyclotetrasiloxane.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:376872 HCAPLUS

DOCUMENT NUMBER: 138:369372

TITLE: High refractive index aromatic-based siloxane difunctional macromonomers

INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.; Ozark, Richard M.; Seelye, David E.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND  | DATE     | APPLICATION NO. | DATE     |
|---------------|---|----------|-----------------|----------|
| WO 2003040154 | A1  | 20030515 | WO 2002-US32772 | 20021015 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, |          |                 |          |

LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,  
RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,  
YU, ZA, ZW  
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,  
LU, MC, NL, PT, SE, SK, TR

|  |    |          |                 |          |
|--|----|----------|-----------------|----------|
| US 2003144451  | A1 | 20030731 | US 2001-4146    | 20011102 |
| US 6723816   | B2 | 20040420 |                 |          |
| CA 2465493   | AA | 20030515 | CA 2002-2465493 | 20021015 |
| EP 1446409   | A1 | 20040818 | EP 2002-784098  | 20021015 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK |    |          |                 |          |
| CN 1582290   | A  | 20050216 | CN 2002-821867  | 20021015 |
| JP 2005508410  | T2 | 20050331 | JP 2003-542199  | 20021015 |
| US 2004059080  | A1 | 20040325 | US 2003-665957  | 20030918 |
| US 7022749   | B2 | 20060404 |                 |          |
| US 2004068077  | A1 | 20040408 | US 2003-666808  | 20030918 |
| US 6881808   | B2 | 20050419 |                 |          |
| US 2004072981  | A1 | 20040415 | US 2003-665946  | 20030918 |
| US 7009023   | B2 | 20060307 |                 |          |
| US 2005085611  | A1 | 20050421 | US 2003-666143  | 20030918 |
| US 7009024   | B2 | 20060307 |                 |          |

PRIORITY APPLN. INFO.: US 2001-4146 A 20011102  
WO 2002-US32772 W 20021015

AB Optically transparent, relatively high refractive index polymeric compns. are used for ophthalmic devices such as intraocular lenses, corneal inlays and contact lenses. The polymeric compns. are produced through the polymerization of  $\geq 1$  aromatic-based siloxane macromonomers or the copolymn. of  $\geq 1$  aromatic-based siloxane macromonomers with  $\geq 1$  nonsiloxy aromatic-based monomers, nonarom.-based hydrophobic monomers or nonarom.-based hydrophilic monomers. An example macromonomer was prepared by hydrosilation reaction of 1,3-bis(4-methacryloyloxybutyl)tetramethyldisiloxane with copolymer of octamethylcyclotetrasiloxane and tetramethylcyclotetrasiloxane.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:376871 HCAPLUS

DOCUMENT NUMBER: 138:369371

TITLE: High refractive index aromatic-based silyl monomers for polymer composition

INVENTOR(S): Salamone, Joseph C.; Kunzler, Jay F.  
; Ozark, Richard M.; Seelye, David E.; Vanderbilt, David P.

PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 2003040152  | A1   | 20030515 | WO 2002-US32686 | 20021011 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, |      |          |                 |          |

YU, ZA, ZM  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,  
 LU, MC, NL, PT, SE, SK, TR

|  |    |          |                 |          |
|--|----|----------|-----------------|----------|
| US 2003105255  | A1 | 20030605 | US 2001-3616    | 20011102 |
| US 6762271   | B2 | 20040713 |                 |          |
| CA 2465238   | AA | 20030515 | CA 2002-2465238 | 20021011 |
| EP 1444239   | A1 | 20040811 | EP 2002-786399  | 20021011 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK |    |          |                 |          |
| CN 1582289   | A  | 20050216 | CN 2002-821932  | 20021011 |
| JP 2005508409  | T2 | 20050331 | JP 2003-542197  | 20021011 |
| US 2004210023  | A1 | 20041021 | US 2004-847941  | 20040518 |
| US 6846897   | B2 | 20050125 |                 |          |
| US 2004215032  | A1 | 20041028 | US 2004-848262  | 20040518 |
| US 2004215156  | A1 | 20041028 | US 2004-848305  | 20040518 |
| US 2004230023  | A1 | 20041118 | US 2004-848308  | 20040518 |
| US 6881809   | B2 | 20050419 |                 |          |

PRIORITY APPLN. INFO.:  
 US 2001-3616 A 20011102  
 WO 2002-US32686 W 20021011

OTHER SOURCE(S): MARPAT 138:369371

AB The title optically transparent, relatively high refractive index polymeric compns. are used for ophthalmic devices such as intraocular lenses, contact lenses and corneal inlays. The polymeric compns. are produced through the polymerization of  $\geq 1$  aromatic-based silyl monomers or the copolymn. of  $\geq 1$  aromatic-based silyl monomers with  $\geq 1$  aromatic or nonarom. nonsiloxy-based monomers, hydrophobic monomers, or hydrophilic monomers. A polymer was prepared by polymerization of N,N-dimethylacrylamide 10,

3-acryloyloxypropyldiphenylmethylsilane (preparation given) 70, and ethylene glycol dimethacrylate 1 part. The film sample had modulus 161 g/mm<sup>2</sup>, tear strength 64 g/mm<sup>2</sup>, elongation 183%, water content 10.5%, and  $\eta$  1.517.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:210815 HCAPLUS  
 DOCUMENT NUMBER: 139:280979  
 TITLE: Contact lens material technology  
 AUTHOR(S): Kunzler, J. F.; Salamone, J. C.  
 CORPORATE SOURCE: Research Development & Engineering, Bausch and Lomb Inc., Rochester, NY, 14603-0450, USA  
 SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2003), 44(1), 215  
 CODEN: ACPPAY; ISSN: 0032-3934  
 PUBLISHER: American Chemical Society, Division of Polymer Chemistry  
 DOCUMENT TYPE: Journal; General Review; (computer optical disk)  
 LANGUAGE: English  
 AB A review on the efforts to design extended wear contact lenses using silicone based hydrogels.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:186184 HCAPLUS  
 TITLE: Contact lens material technology  
 AUTHOR(S): Kunzler, J. F.; Salamone, J. C.  
 CORPORATE SOURCE: Research Development & Engineering, Bausch & Lomb, Rochester, NY, 14603-0450, USA  
 SOURCE: Abstracts of Papers, 225th ACS National Meeting, New

Orleans, LA, United States, March 23-27, 2003 (2003),  
POLY-029. American Chemical Society: Washington, D.  
C.

CODEN: 69DSA4

DOCUMENT TYPE: Conference; Meeting Abstract  
LANGUAGE: English

AB The correction of vision using contact lenses has grown into a billion dollar industry over the past 40 yr. Starting out with small made-to-order labs. in the 1950s, the contact lens industry has increased several fold in volume with lenses now mass produced using automated manufacturing processes. For the past thirty years the contact lens industry has been engaged in the development of the ultimate extended wear contact lens. This has not been a trivial task. The material must possess chemical and thermal stability, biocompatibility and be wettable by tears. The material must also be permeable to oxygen. Due to a lack of blood vessels within the central corneal framework, most of the cornea obtains oxygen directly from the atmospheric. One approach to design extended wear lenses is based on high water content hydrogels. Three addnl. approaches consist of the development of materials based on polydimethylsiloxane (PDMS). This includes the design of rigid gas permeable silicone based lenses, low modulus PDMS based elastomers and low modulus silicone hydrogels. This presentation will review current contact lens material technol. and provide an update on the extended wear lens design approaches.

L49 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:776947 HCAPLUS

TITLE: Contact lens material technology

AUTHOR(S): Grobe, G.; Kunzler, J. F.; Seelye, D.;  
Salamone, J. C.

CORPORATE SOURCE: Surface Science, Bausch & Lomb, Rochester, NY, 14603,  
USA

SOURCE: Abstracts of Papers, 224th ACS National Meeting,  
Boston, MA, United States, August 18-22, 2002 (2002),  
PMSE-217. American Chemical Society: Washington, D.  
C.

CODEN: 69CZPZ

DOCUMENT TYPE: Conference; Meeting Abstract  
LANGUAGE: English

AB For the past thirty years the contact lens industry has been engaged in the development of the ultimate extended wear contact lens. This has not been a trivial task. The material must possess chemical and thermal stability, biocompatibility and be wettable by tears. The material must also be permeable to oxygen. Due to a lack of blood vessels within the central corneal framework, most of the cornea obtains oxygen directly from the atmospheric. One approach to design extended wear lenses is based on high water content hydrogels. Three addnl. approaches consist of the development of materials based on polydimethylsiloxane (PDMS). This includes the design of rigid gas permeable silicone based lenses, low modulus PDMS based elastomers and low modulus silicone hydrogels. This presentation will provide an update on these extended wear lens design approaches.

L49 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:560055 HCAPLUS

TITLE: Contact lens material technology

AUTHOR(S): Grobe, G.; Kunzler, J.; Seelye, D.;  
Salamone, J. C.

CORPORATE SOURCE: Research Development and Engineering, Bausch and Lomb,  
Rochester, NY, USA

SOURCE: PMSE Preprints (2002), 87, 491  
 CODEN: PPMRA9; ISSN: 1550-6703  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal; Miscellaneous; (computer optical disk)  
 LANGUAGE: English  
 AB Unavailable

L49 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:332073 HCAPLUS  
 DOCUMENT NUMBER: 136:345858  
 TITLE: Prevention of bacterial attachment to biomaterials by cationic polysaccharides  
 INVENTOR(S): Borazjani, Roya; Salamone, Joseph C.; Ammon, Daniel M., Jr.; Kunzler, Jay F.; Hu, Zhenze  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE        |
|--|------|----------|------------------|-------------|
| WO 2002034308  | A2   | 20020502 | WO 2001-US30373  | 20010927    |
| WO 2002034308  | A3   | 20020815 |                  |             |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW  |      |          |                  |             |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |      |          |                  |             |
| CA 2426045   | AA   | 20020502 | CA 2001-2426045  | 20010927    |
| AU 2002012985  | A5   | 20020506 | AU 2002-12985    | 20010927    |
| EP 1328303   | A2   | 20030723 | EP 2001-981333   | 20010927    |
| EP 1328303   | B1   | 20041124 |                  |             |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  |      |          |                  |             |
| BR 2001015177  | A    | 20040210 | BR 2001-15177    | 20010927    |
| JP 2004517653  | T2   | 20040617 | JP 2002-537359   | 20010927    |
| CN 1589162   | A    | 20050302 | CN 2001-817934   | 20010927    |
| ES 2233701   | T3   | 20050616 | ES 2001-1981333  | 20010927    |
| TW 574043  | B    | 20040201 | TW 2001-90126178 | 20011023    |
| US 2003087022  | A1   | 20030508 | US 2002-199201   | 20020718    |
| ZA 2003003009  | A    | 20040716 | ZA 2003-3009     | 20030416    |
| HK 1058156   | A1   | 20050916 | HK 2003-109411   | 20031224    |
| US 2005181013  | A1   | 20050818 | US 2005-78268    | 20050311    |
| PRIORITY APPLN. INFO.:   |      |          | US 2000-695529   | A 20001024  |
|  |      |          | WO 2001-US30373  | W 20010927  |
|  |      |          | US 2002-199201   | A1 20020718 |
| AB Method for inhibiting adhesion of bacteria to the surface of a biomedical device comprising binding a cationic polysaccharide to the surface of the biomedical device. Three Surevue lenses in 3 different solns. were submitted for comparison by atomic force microscopy (AFM) anal. The lenses were treated overnight, and then removed from the vials and desalinated in water in a static fashion for at least 15 min. The AFM results indicate that Polymer JR (in 0.1% solution) has an effect on the morphol. of the lens |      |          |                  |             |

surface, indicating a thin film covering with large multi-shaped and sized voids on the anterior and posterior side of the lens.

L49 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:904333 HCAPLUS  
 DOCUMENT NUMBER: 136:42912  
 TITLE: Surface treatment of medical device  
 INVENTOR(S): Kunzler, Jay F.; Seelye, David E.;  
 Salamone, Joseph C.  
 PATENT ASSIGNEE(S): Bausch & Lomb Incorporated, USA  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE     |
|---|------|----------|------------------|----------|
| WO 2001094454   | A1   | 20011213 | WO 2001-US15616  | 20010515 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                  |          |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |          |
| US 6428839  | B1   | 20020806 | US 2000-586941   | 20000602 |
| CA 2409942  | AA   | 20011213 | CA 2001-2409942  | 20010515 |
| EP 1287060  | A1   | 20030305 | EP 2001-935508   | 20010515 |
| EP 1287060  | B1   | 20051109 |                  |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR   |      |          |                  |          |
| BR 2001011645   | A    | 20031007 | BR 2001-11645    | 20010515 |
| JP 2003535626   | T2   | 20031202 | JP 2002-502001   | 20010515 |
| ES 2252235  | T3   | 20060516 | ES 2001-1935508  | 20010515 |
| TW 567204   | B    | 20031221 | TW 2001-90111725 | 20010516 |
| PRIORITY APPLN. INFO.: US 2000-586941 A 20000602  |      |          |                  |          |
| WO 2001-US15616 W 20010515  |      |          |                  |          |

AB The invention provides a method for improving the wettability of a medical device, comprising the steps of: (a) providing a medical device formed from a monomer mixture comprising a hydrophilic monomer and a silicone-containing monomer, wherein the medical device has not been subjected to a surface oxidation treatment; (b) contacting a surface of the medical device with a solution comprising a proton-donating wetting agent, whereby the wetting agent forms a complex with the hydrophilic monomer on the surface of the medical device in the absence of a surface oxidation treatment step and without the addition of a coupling agent. Silicone hydrogel lens formulations were treated with a 0.1% poly(acrylic acid) (PAA), 1.0% PAA and a 0,2% Carbopoll solns. The lenses had excellent mech. properties and wettability.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:213634 HCAPLUS  
 DOCUMENT NUMBER: 131:35838  
 TITLE: Silicone hydrogels for contact lens application

AUTHOR(S): Grobe, G. L.; Kunzler, J.; Seelye, D.;  
Salamone, J. C.  
CORPORATE SOURCE: Global Scientific Affairs, Vision Care Bausch and Lomb  
Inc., Rochester, NY, 14692-0450, USA  
SOURCE: Polymeric Materials Science and Engineering. (1999),  
80, 108-109  
CODEN: PMSDGG; ISSN: 0743-0515  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A new silicone based hydrogel Balafilcon, containing vinyl  
3-[tris(trimethylsiloxy)silyl]propylcarbamate in the formulation,  
possessing high optical transparency, a low modulus of elasticity, high  
oxygen permeability, high levels of fluid transport, and a wettable and  
biocompatible surface is described.  
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:93532 HCAPLUS  
TITLE: Silicone hydrogels for contact lens application  
AUTHOR(S): Salamone, J. C.; Grobe, G. L.; Seelye, D.;  
Kunzler, J.  
CORPORATE SOURCE: Bausch and Lomb, Rochester, NY, 14692, USA  
SOURCE: Book of Abstracts, 217th ACS National Meeting,  
Anaheim, Calif., March 21-25 (1999), PMSE-163.  
American Chemical Society: Washington, D. C.  
CODEN: 67GHA6  
DOCUMENT TYPE: Conference; Meeting Abstract  
LANGUAGE: English  
AB This paper describes a new silicone based hydrogel material,  
Balafilcon® that was designed for extended contact lens wear. The  
material is based on 3-[tris(trimethylsiloxy)-silyl]propyl vinyl carbamate  
(TRISVC). The TRISVC is prepared by the reaction of aminopropyl  
tris(trimethylsiloxy)silane with vinylchloroformate. Copolymn. of TRISVC  
with hydrophilic monomers results in a transparent hydrogel that possesses  
a low modulus of elasticity, high oxygen permeability, and high levels of  
fluid transport. The Balafilcon® material surface, when treated using  
an oxidative plasma, results in a highly wettable, biocompatible surface  
that maintains the high level of both oxygen and fluid permeability.

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